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Orthopedics

Fractures of Neck of Femur

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The problem of fractures of the neck of the femur is intricate, not yet solved in its entirety. There is still controversy on many aspects.

This is to be a brief review of the subject, including a discussion of factors which have a bearing on the type of procedure to be employed. Various methods of treatment will be presented; technical details will not be given.

Classification

There are two broad groups: (A) Extracapsular (Trochanteric), (B) Intracapsular (Cervical).

(A) Extracapsular (Trochanteric)

The classical subdivision of this group into intratrochanteric, trans-trochanteric and pertrochanteric is confusing and meaningless. It is more important to know whether the fracture is stable or unstable and whether it is of the reverse type.

(B) Intracapsular (Cervical)

There is some merit in the subdivision of these fractures into (a) subcapital and (b) transcervical.

Clinically, one may have an idea as to whether the fracture is intra or extra capsular by the amount of external rotation of the leg. However, X-ray examination is always mandatory, not only for the diagnosis but also for the planning and the execution of treatment.

Trochanteric fracture, which occurs in the older age group, is more common than cervical fracture. These injuries occur in younger people only if the accident is violent; while in the aged, it is usually trivial in nature.

Mechanism of the Fracture

In most instances it is almost impossible to elicit the initiating cause; but in some cases the history, and in others the physical findings, are definite enough to give an idea as to how these fractures were brought about. It is clear that most of these injuries occur from relatively minor or trivial accidents, in elderly people, where the bone is osteoporotic. It is quite understandable that some look upon these as being march, fatigue or insufficiency fractures. I believe that in many cases the fracture, particularly of the neck, is sustained before the patient falls. The following authentic history exemplifies this:

A woman of sixty-five, while crossing the street, turned quickly on her left leg at the sound of an automobile horn. She felt a sudden pain in her left hip and then fell to the ground. She sustained a transcervical fracture of the left hip.

It is interesting to note that L. D. Smith, of Milwaukee, working in the engineering laboratory of Marquette University, using controlled measured forces of impact and pressures of several hundreds of pounds through and to the hip joint from all angles and directions, produced various fractures of the pelvis and trochanter. No cervical fractures resulted. He was, however, able to obtain a fracture of the neck of the femur by exerting strain in external rotation with as little as twelve pounds.

Trochanteric fractures are usually produced by falling on to the outer side of the hip. Contusion, which is often seen in this area on examination, is evidence of this.

I thought it might be interesting for me to quote from Sir Astley Cooper's 1842 edition of his book "On Dislocations and Fractures of the Joints."

"That this state of bone in old age tends much to production of these fractures is shown by the slight causes which occasion them. In London, accidents most frequently occur when the people, walking on the edge of the elevated foot path, slip upon the carriage pavement. Though the descent be only a few inches, yet being sudden and unexpected, and the forces acting perpendicularly with the advantage of a lever in the cervix, it produces a fracture of the neck of the thigh bone; and as the fall is the consequence, the fracture is imputed by ignorant persons to the fall and not the true cause.

Other trivial accidents may also produce this fracture. I was informed by a person, when at her counter and suddenly turning to a drawer behind her, some projection in the floor caught her foot and prevented it turning with the body, by which the neck of the thigh bone became fractured.

A fall upon the trochanter major will also produce it, but I have dealt particularly on light causes by which it is occasioned, that the young surgeon may be upon his guard respecting it, as he might otherwise believe that an injury of such importance could scarcely be the result of a slight accident and that excessive violence is necessary to break the neck of the thigh bone, but such opinion is as liable to be injurious to his reputation as the error of confounding this accident with dislocation."

Treatment

1. Trochanteric Fractures

There is much difference of opinion on the treatment of these cases. Some recommend conservative, and others, operative treatment. No matter how these fractures are treated, bony union

is assured in most cases. Once united, taking into account the age at which this injury usually occurs, the functional result is, on the whole, satisfactory. This is regardless of whether or not normal anatomical position has been restored. As long as they can become ambulant and self-sufficient, we are satisfied.

The classification of these fractures, which depends upon their stability, will help in determining beforehand whether the normal anatomical position or union with varus deformity can be expected.

In the unstable type, varus deformity is the outcome. Here we have shattering of the inner cortex, usually with separation of the lesser trochanter. There is nothing to prevent varus deformity from occurring, no matter what form of treatment is used.

When the figures are compared between those following strictly conservative measures and those following mainly surgical measures, taking into account the mortality and morbidity, there is little to choose between them.

If conservative measures are to be used effectively, it is imperative that the whole organization be properly geared. Nursing care, especially, must be beyond reproach. If the nursing staff is inadequate or inept in the bed care of this patient, the mortality and morbidity will be raised with conservative treatment and it is obvious that, under these conditions, operative treatment is the method of choice. After adequate internal fixation, general ward care will usually suffice. It is agreed that the prime consideration in any treatment should be that of mortality; compared to this, other features are of no importance. However, operative treatment in trochanteric fractures offers further advantages. It allows early mobilization of the patients, permitting them to get out of bed at an early date, usually within the first week. It decreases the number of hospital days and, in my experience, the incidence of mental derangement is much less than with conservative measures.

If the patient is to be treated by operation, it is my belief that it should be done as early as possible. When one has large, troublesome pressure sores develop within twenty-four hours of the accident, the urgency for early operation is obvious. Some prefer to wait for a period of five to seven days before operation, arguing that these cases are medical emergencies and that this length of time is necessary before surgery can be safely undertaken. I do not hold this view. I feel that the majority of cases can be made fit for operation very quickly and that they should be looked upon as surgical emergencies from the beginning. A wait of five or seven days is long enough to increase morbidity considerably. Patients will very often improve remarkably after a fracture is

properly maintained by internal fixation.

I do not consider that local anaesthesia is ever indicated in these cases. I am upheld in my belief on this point in that those who report large series find a greater mortality rate in those operated upon under local anaesthesia.

Of the methods used in conservative treatment, I would like to condemn any method which requires the use of plaster. Well leg traction can produce serious complications in the way of pressure sores, and as far as allowing for increased mobility, it is really not much in advance over the use of a plaster spica. I cannot recommend the use of this method. Whenever skeletal traction is used, pin track infection can prove to be a serious danger.

2. Cervical Fractures

Let me again refer to Astley Cooper's observations:

"Much difference of opinion exists upon the union of the fractured neck of the thigh bone. It has been asserted that these fractures unite like those of other parts of the body; but the dissections which I have made in early life, and the opportunities I have since had to confirm these observations, have convinced me that a fracture of the neck of the thigh bone generally unites by ligament and not by bone. This principle I taught in my lectures for thirty years and it is a most essential point; as it affects the reputation of the surgeon, as well as being the subject of some interest in forensic medicine. If these fractures unite like those of other parts of the body, the patient who remains lame after treatment would undoubtedly have the right to such redress from the surgeon at the hands of the law."

Non-union of this type of fracture was the rule in Astley Cooper's time, and it remained so until Royal Whitman introduced his abduction method of reduction, using a plaster spica for fixation. This was undoubtedly a great advance in the treatment of fractures of the neck of the femur. Properly used, this method gave satisfactory results in about sixty per cent. of the cases. With the advent of inert metals such as stainless steel and vitallium, Smith-Petersen was able to introduce his method of internal fixation successfully. This was a further advance in that it reduced morbidity and mortality caused by the plaster spica; but as far as the fracture itself was concerned, the results by this method were no better than those obtained by the Whitman treatment. Therefore, there is place for further improvement in the treatment of these fractures.

Causes of Failure

(1) Avascular Necrosis of the Proximal Fragment

This can be complete or partial. Although bony union can occur by creeping substitution with avascular necrosis, it is a common cause for non-union. In the stage of revascularization, late softening of bony structure allows deformation of

the head to occur. With this, there is usually destruction of articular cartilage, producing a painful arthritis.

This condition is caused by damage to the blood vessels which lie in the retinaculæ of the neck and go to supply the head. In many cases, the fate of the head of the femur is sealed at the time of the accident, all vessels being involved at that time. However, there are cases in which the blood supply is just adequate enough to maintain the vitality of the head. In these, the introduction of a triflange Smith-Petersen nail may cut off what remains of the blood supply, thereby precipitating an avascular necrosis. This is valid reason for using some other form of internal fixation, such as multiple small calibre Austen-Moore pins or multiple Steinman pins.

Avascular necrosis at present can only be recognized by X-ray. It shows as an increased density of the affected fragment of bone on the X-ray plate. It is a relative density brought about by absorption of the adjacent viable bone due to disuse. It will, therefore, not show up on X-ray until his absorption becomes radiologically evident. It will not be seen before about two months and it may not be evident at seven months, so that repeated and prolonged X-raying is necessary before one can be certain that this complication has not occurred.

(2) Non-union with Absorption of the Neck

This may be due to avascular necrosis, infection, improper reduction or faulty pinning. However, it can occur in the absence of any of these where the fracture line is in an unfavorable direction. If the direction of the fracture line is at such an angle that the action of the muscles impact these fragments, then conditions are favorable for bony union. If, on the other hand, the line is such that muscle action will cause a shearing at the fracture site, non-union is apt to occur even with internal fixation. If the angle formed between the line of fracture and the horizontal line between the anterior superior Iliac spines (Pauwel's angle) is less than thirty degrees, then conditions for bony union are favorable.

A simpler angle of measurement is that recommended by Eyre-Brock and Pridie; i.e. the angle formed between the fracture line and the line of the shaft of the femur. If this exceeds thirty-seven degrees, then conditions for bony union are favorable.

With this in mind, it is sound practice to alter the line of fracture so that a favorable line will be obtained. This can be done by means of a McMurray Osteotomy which shifts the upper two resulting fragments into valgus and alters the fracture line so that muscular action will cause impaction of the fragments. This is advocated and practiced by many as a primary method of

treatment where it is obvious from the outset that the line of fracture is at an unfavorable angle.

Recently, McElvenney of Chicago has introduced a method of reduction and pinning where, by pushing the neck inwards, the head is tilted so that only part of the fragments are in contact but with the fracture line at a favorable angle. His figures are most impressive, claiming a failure rate of only sixteen per cent. This method is considered by some as one of the greatest recent advances in fracture treatment.

It is obvious that an unfavorable direction of the fracture line, as well as being a cause for non-union due to shearing forces, will increase the incidence of avascular necrosis.

About five or six years ago, the Judet brothers of Paris, France, introduced the prothesis—an artificial head made from an acrylic resin. There are now several designs of protheses made from various types of plastics and metal. So far, it appears that these will prove to be an additional aid in the treatment of fractures of the neck of the femur. These are now being used in avascular necrosis, non-union and, by many, in fresh fractures, where the fracture shaft angle is unfavorable.

These cases may be allowed to bear weight after three weeks, and in many cases, much sooner. When one compares this to the four or six months required with other forms of treatment, one can see the immense advantage this method of treatment can be as a primary procedure in a very old person.

Regarding impacted fractures, these are usually subcapital in location and are presumably produced in abduction. The line of fracture usually lies at a favorable angle and it is often considered that they are safe to treat without any form of fixation. I believe that this view is a dangerous one and that no fracture of the neck of the femur is safe without some form of internal fixation.

From what I have said, it is obvious that I am in favor of internal fixation for all types of fractures of the neck of the femur whenever possible, and I urge that they all be treated as surgical emergencies if morbidity and mortality are to be decreased to a minimum under our present local conditions of practice. It is obvious that there will be some cases where conditions do not allow for surgery at any time.

I hope that I have stressed the fact that there is no rule of thumb method in treatment of fractures of the neck of the femur and that each case requires judicious consideration. In the treatment of these fractures, as in all other fractures, next to the all-important consideration of mortality, the aim should be to produce a functional result commensurate with the condition of the patient. To achieve this one requires knowledge, experience and judgment.

Gynaecology

The Physiology of Reproduction The Endocrine Glands and Their Secretions

From the Faculty of Post-Graduate Studies of the Winnipeg General Hospital in the Department of Obstetrics and Gynaecology.

Section "B" No. 7

The External Genital Organs

Gross Anatomy

The External Genital organs of the female include: the mons pubis, the labia mapora et minora pudendi, the clitoris, the vestibule of the vagina, the bulb of the vestibule and the greater vestibular glands. The term pudendum or vulva, as generally applied, includes all these parts.

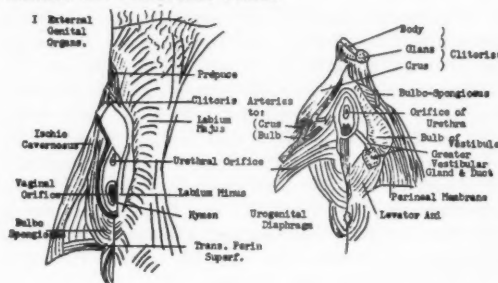
The mons pubis, the rounded eminence in front of the pubic symphysis is formed by a collection of fatty tissue beneath the skin. It becomes covered with hair at the time of puberty over an area which has a horizontal upper limit whereas in the male the pubic hair extends upwards towards the umbilicus in and near the median plane.

The labia majora are two prominent longitudinal cutaneous folds which extend downwards and backwards from the mons pubis and form the lateral boundaries of a fissure or cleft named the pudendal cleft into which the vagina and urethra open. Each labium has two surfaces, an outer, pigmented and covered with crisp hairs; and an inner, smooth and beset with large sebaceous follicles. Between the two surfaces there is a considerable quantity of areolar tissue, fat and a tissue resembling the dartos muscle of the scrotum besides vessels, nerve and glands. The labia are thicker in front where they form by their meeting the anterior commissure. Posteriorly they are not really joined, but appear to become lost in the neighboring integument, ending close to and nearly parallel with each other; together with the connecting skin between them they form the posterior commissure, or—posterior boundary of the pudendum. The interval between the posterior commissure and the anus from 2.5 to 3.0 cms. in length constitutes the gynecological perineum.

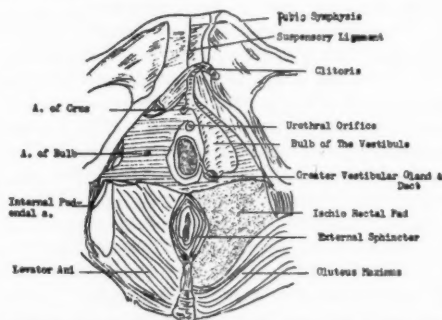
The labia minora are two small cutaneous folds situated between the labia majora and extending from the clitoris obliquely downwards laterally and backwards for about 4 cms. to terminate between the labia majora laterally and the vaginal orifice medially; in the nullipara the posterior ends of the labia minora are usually joined across the median plane by a fold of skin termed the frenulum of the labia. Anteriorly each labium minus divides into two portions; the upper division passes above the clitoris to meet its fellow of the opposite side forming a fold which overhangs the

glans clitoridis and is named the preputium clitoridis; the lower division passes below the clitoris and is united to its under surface forming with its fellow of the opposite side the frenulum clitoridis. Numerous sebaceous follicles are placed on the apposed surfaces of the labia minora.

The vestibule of the vagina is the cleft between the labia minora; in it the vaginal and external urethral orifices are situated and between them numerous small mucous glands open on the surface of the vestibule. The part of the vestibule between the vaginal orifice and the frenulum of the labia minora consists of a shallow depression named the vestibular fossa.



II Anal & Urogenital Triangles



The clitoris is an erectile structure homologous with the penis. It is situated caudal to the anterior commissure partially hidden between the anterior ends of the labia minora. The body of the clitoris consists of two corpora cavernosa composed of erectile tissue enclosed in a dense layer of fibrous membrane and separated along their medial border by an incomplete fibrous pectiniform septum; each corpus cavernosum is connected to the pubic and ischial rami by a crus. The free extremity or glans clitoridis is a small rounded tubercle consisting of spongy erectile tissue. The clitoris is provided like the penis with a suspensory ligament and with two small muscles named the ischio cavernosi. The suspensory ligament which is triangular in shape is attached above to the pubic symphysis

and below it blends with the fibrous envelope of the corpora cavernosa clitoridis. The ischio cavernosus muscle, smaller than the corresponding muscle in the male covers the unattached surface of the crus clitoridis. It arises by tendinous and fleshy fibres from the inner surface of the tuberosity of the ischium behind the crus clitoridis and from the adjacent portion of the ramus of the ischium. The muscular fibres end in an aponeurosis which is inserted into the sides and under surface of the crus clitoridis. It acts to compress the crus clitoridis and retard the return of the blood through the veins and hence serves to keep the clitoris erect. One fasciculus of the bulbo-spongiosus muscle crosses over the body of the clitoris so as to compress the dorsal vein, thus contributing to the aforementioned function.

The vaginal orifice is a median slit below and behind the opening of the urethra. Its size varies inversely with that of the hymen.

The hymen vaginae is a thin fold of mucous membrane situated at the orifice of the vagina; the inner surfaces of the fold are normally in contact with each other and the vaginal orifice appears as a cleft between them. The hymen varies much in shape. When stretched its commonest form is that of a ring, generally broadest posteriorly, sometimes it is represented by a semilunar fold with its concave margin turned towards the pubis. Occasionally it is cribriform or its free margin forms a membranous fringe. It may be entirely absent or may form a complete septum across the lower end of the vagina. When the hymen has been ruptured small rounded elevations known as the carunculae hymenales are found as its remains.

The external urethral orifice is placed about 2.5 cms. behind the glans clitoridis and immediately in front of the orifice of the vagina; it usually assumes the form of a short sagittal cleft with slightly raised margins.

The bulb of the vestibule is the homologue of the bulb of the penis and the adjoining part of the corpus spongiosum penis of the male. It consists of two elongated masses of erectile tissue placed one on each side of the vaginal orifice and united to each other in front by a narrow band termed the commissura bulborum or pars intermedia. Each lateral mass measures about 3 cm. in length. Their posterior ends are expanded and are in contact with the greater vestibular glands; their anterior ends are tapered and joined to one another by the commissure; their deep surfaces are in contact with the perineal membrane; superficially they are covered with the bulbo-spongiosus muscle. This muscle is attached posteriorly to the perineal body where it blends with the sphincter ani externus and its fibres pass forwards on each side of the vagina to be inserted into the corpora cavernosa clitoridis. It acts to diminish the orifice of the vagina and previously indicated con-

tributes to the erection of the clitoris by the compression of its dorsal vein.

The greater vestibular glands are the homologues of the bulbourethral glands in the male. They consist of two small round or oval bodies of a yellow-reddish color situated one on each side of the vaginal orifice in contact with the posterior end of the lateral mass of the bulb of the vestibule. Each gland opens by means of a duct 2 cm. long immediately lateral to the hymen in the groove between its attached border and the labium majus.

The para-urethral glands are considered to be the homologues of the prostatic glands of the male. They form two small groups of glands on either side of the lower end of the urethra which open into a duct named the ductus paraurethralis which runs down in the submucous tissue and ends in a small aperture on the lateral margin of the external urethral orifice.

The sphincter urethrae muscle with the transversus perinei profundus forms what is termed the urogenital diaphragm. Like the corresponding muscle in the male it consists of external and internal fibres. The external fibres arise on either side from the margin of the inferior-ramus of the pubis. They are directed across the pubic arch in front of the urethra and pass around it to blend with the muscular fibres of the opposite side between the urethra and the vagina. The innermost fibres encircle the lower end of the urethra.

Some mention should be made of the superficial and deep fascia of the Urogenital region. The superficial fascia consists of a superficial fatty and a deep membranous layer. The fatty layer is thick, loose and areolar in texture and contains a variable amount of fat in its meshes. In front it is continuous with the fibro-fatty tissue of the mons pubis; behind with the subcutaneous tissue surrounding the anus, and on each side with the same fascia on the medial side of the thigh.

The membranous layer of superficial fascia is thin and aponeurotic structure. It is continuous in front with the membranous layer of the superficial fascia upon the anterior abdominal wall; on each side it is attached to the margin of the rami of the pubis and ischium lateral to the crus clitoridis and as far back as the tuberosity of the ischium; posteriorly it curves around the transversus perinei superficialis to join the posterior margin of the perineal membrane.

The deep fascia of the urogenital region forms an investment for the transversus perinei profundus and the sphincter urethrae, but within it there are also the deep vessels and nerves of this part. It is stretched almost horizontally across the pubic arch so as to close the anterior part of the pelvic outlet. It consists of two membranous laminae which are united at the free edges of the muscles. The stronger and more superficial of these laminae is named the perineal membrane.

Its base, directed backwards is connected to the perineal body and is continuous with the anal fascia and behind the transversus perinei superficialis with the membranous layer of the superficial fascia. Its lateral margins are attached to the inferior ramus of the pubis and the ramus of the ischium above the crus clitorides. Its apex, directed forwards is thickened to form the transverse perineal ligament and between this ligament and the inferior pubic ligament the dorsal vein of the clitoris enters the pelvis. It is perforated from 2 to 3 cms. below the symphysis pubis by the urethra, the aperture for which is circular and about 6 mm. in diameter. Immediately posterior to this it is pierced by the aperture of the vagina with the external coat of which it blends. It forms a covering for the greater vestibular glands and thin ducts, the internal pudendal vessels, the dorsal nerves of the clitoris, the arteries and nerves of the vestibular bulbs and a plexus of veins. These structures are separated from the pelvis by a second but less definite layer of fascia which forms the deeper of the two laminae of the deep fascia of the urogenital region. It is continuous with the obturator fascia and stretches across the pubic arch.

The Development of the External Genital Organs

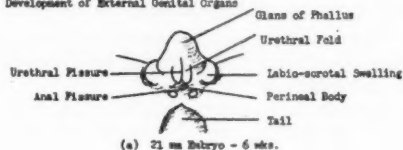
In embryos, in the indifferent phase of sexual development, the surface area around the external aspect of the cloacal membrane shows three small protuberances. In front, between the anterior margin of the cloacal membrane and the infra-umbilical abdominal wall is the genital tubercle and on either side, flanking the membrane, are the genital swellings. The ectodermal area between the swellings is the shallow ectodermal cloaca. By the 16 mm. stage when the uro-rectal septum has reached the cloacal membrane, the latter is divided into a posterior part, the anal membrane and an anterior part, the urogenital membrane. The anal membrane lies in the floor of the posterior part of the ectodermal cloaca, now called the anal pit. In later development the anal membrane breaks down so that continuity is established between the anal pit and the caudal part of the hindgut.

The urogenital membrane lies at the base of the anterior part of the ectodermal cloaca now called the urogenital sulcus or fossa. As the phallic portion of the urogenital sinus elongates in the sagittal plane it encroaches on or is drawn into the under surface of the genital tubercle. At the same time the entodermal lining of the urogenital membrane proliferates actively, especially in its anterior part and the cavity of the phallic portion of the sinus is more or less obliterated. The proliferation in the part of the sinus related to the genital tubercle forms a solid urethral plate of epithelial cells.

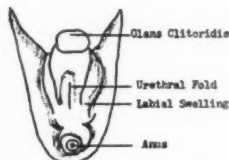
Shortly after the 16 mm. stage the posterior part of the urogenital membrane breaks down and a communication, the primitive urogenital orifice, is established between the phallic portion of the urogenital sinus and the urogenital sulcus. The anterior portion of the latter extends on to the ventral aspect of the genital tubercle as a urethral groove on the surface of the urethral plate. The primitive urogenital orifice and the urethral groove are bounded on either side by urethral folds.

Up to approximately the 25 mm. stage the appearances of the external genitalia of the female resemble very closely those of the male except that the urethral groove is shorter in the female.

XII Development of External Genital Organs



(a) 21 mm Embryo - 6 wks.



(b) 7 mm. Embryo



(c) Twelve Wk. Embryo

Soon after this stage the genital tubercle becomes bent caudally and can be recognized as the clitoris. The genital or labial swellings grow together in front of the anus and posterior to the urogenital orifice to form the posterior commissure. The lateral portion of the labial swellings then enlarge to form the labia majora.

The urethral folds, flanking the urogenital orifice do not fuse but persist as the labia minora. Thus, the phallic portion and the greater part of the pelvic portion of the urogenital sinus are exposed on the surface of the vestibule. The vagina and urethra open separately into this, the former only partially because of the presence of the hymen.

The precise junction between the ectoderm and entoderm is not identifiable in the later stages of development, but is generally taken to be at the free edges of the labia majora.

The greater vestibular glands arise as buds from the epithelium lining the urogenital sinus during the latter part of the third month and show a characteristically differentiated morphology by the time of birth although they do not get the greater part of their growth until puberty approaches.

The Anomalies of the Female Genital Organs

The incidence of occurrence of the anomalies of the female external genitalia has been variously estimated at from .02% to .5% of the total female population. Classification of anomalies of this region proves a difficult problem. Schwalbe has suggested the following division:

A. Anomalies due to lack of fusion of the Mullerian Ducts.

(1) Duplication with no system defects—The author reports one case in which two completely separate sets of genital organs were present including the paired external genitalia.

(2) Duplication with system defects. No mention was made of the external genitalia under this heading.

B. Anomalies due to lack of development of a particular part or of a whole system.

(1) Hypospadias—This has been described by one author as being the most frequent of the anomalies occurring in the external genitalia. It is seen with particular frequency in cases of pseudo-hermaphroditism and is due to the failure of development of the system normally separating the urinary and vaginal canals so that the urethra opens into the vagina.

(2) Abnormal Communication with other structures. Such communication may occur with the rectum, urethra and ureter. The following anomalies of this type have been described:

i. Recto-vaginal fistula with or without a separate anal opening.

ii. A common opening for the rectum and vagina due to a failure in development of the uro-rectal system.

iii. Abnormal opening of a ureter directly into the vestibule.

iv. Abnormal opening of the anus directly into the vestibule.

(3) Infantilism or Genital hypoplasia. Full development of the female sex organs may fail to be achieved due to insufficient stimulation by or response to sexual hormones. The hormonal deficiency may be due to either pituitary or ovarian deficiency or both. Infantilism may be manifested by deficient development of secondary sex characteristics and hypoplasia of the genital organs or may be limited to the latter. In such case the findings may include thin small labia, a small scarcely projecting clitoris, a greater depth of the vestibule and a masculine distribution of pubic hair. The perineum may be short and concave and in the midline or in its upper part may be covered by an extension of the mucosa of the vulva.

C. Excessive development of a particular part of a whole system.

1. Simple congenital hypertrophy of the clitoris, labia minora or labia majora may occur. These organs may either be enlarged separately or in

various combinations. One explanation postulates stimulation of the foetal genital organs by maternal oestrogens which have passed the placental barrier in excessive amounts.

2. Imperforate Hymen—This is one of the most important anomalies of the genital apparatus and is the commonest cause of menstrual retention. Another common anomaly of the hymen is abnormal thickness or rigidity which often gives rise to inability to carry on coitus.

D. Miscellaneous Anomalies:

1. Bifid Clitoris—This condition is usually a complication of exstrophy of the bladder. The generally accepted explanation is a failure of mesoderm to migrate across the midline in the region of the genital tubercle and infra umbilical portion of the anterior abdominal wall leaving the entoderm and ectoderm in opposition. As in the case of the anal and urogenital membranes which are also composed only of ectoderm and entoderm there is a breaking down in this region resulting in exstrophy of the bladder and bifid clitoris. Epispadias occurs in the female as part of this same process.

2. Complete duplication of the clitoris may occur as a separate entity apart from the condition described above.

3. Agglutination of the labia or what is sometimes referred to as genital atresia, is a rare anomaly and usually only involves the labia minora. Precise figures of incidence are lacking. In the majority of such cases the agglutination is not the result of an embryological defect but is produced by adhesive inflammation of the labia. In one series of 20 cases neither vaginitis nor acute illness was noted in any case. In the absence of a specific etiological agent any minor trauma causing roughening of the surface of the labia is believed to be the most important factor.

The condition is usually noted during infancy and because of the scrotum—like appearance may lead to a mistaken diagnosis of hermaphroditism. As a rule labial agglutination of this sort can be readily cured by forcibly separating the labia.

Pseudohermaphroditism

Perhaps the most fascinating group of anomalies of the external genitalia is classed under the term Pseudo-hermaphroditism. McCahey has collected the data from 67 reported cases of intersexuality. Cases associated with extra-gonadal tissue lesions such as adrenal tumors were not included. This contained 15 cases of female pseudohermaphroditism which we are concerned with here. This summary although not inclusive serves to indicate most of the anomalies likely to be encountered in the female external genitalia.

In all the cases the gonads were at the normal ovarian site. In two cases only one ovary was present and in three cases they were small. In

one case the gonads consisted of the thick tissue at the free ends of the oviducts.

The phallus was enlarged and penis-like in all 15. The urethra was penile in one. In another there was a meatus at the tip of the phallus with a short penile urethra.

The vagina in 5 was normal, in three small and in one blind. The labia were rudimentary in two and resembled a scrotum in one.

In the 6 without a vagina there were: in 1, a scrotum; in 1, a cleft scrotum; in 1, folds like a scrotum; in 1, rudimentary labia; in 2 only one opening in the perineum—the urethral orifice.

The posterior portion of the vagina was connected with the introitus in 8; with the posterior urethra in 3, ended in the deep perineum in 2, and in two the abnormal termination was not determined.

Inguinal hernia was not present in any case there was no mention of a prostate. Cystoscopy was done in 1 case and no structures resembling those of a prostatic urethra were seen.

The Blood Supply to the External Genitalia

The arterial blood supply to the External Genital organs is derived from the internal pudendal artery and the superficial and deep external pudendal arteries.

The internal pudendal artery is the smaller of the two terminal branches of the anterior trunk of the internal iliac artery. Though the course of the artery is the same in the two sexes the vessel is smaller in the female than in the male and the distribution of its branches somewhat different. From its origin it runs downward and laterally to the lower border of the greater sciatic foramen and passing from the pelvis between the piriformis and coccygeus enters the gluteal region through the lower part of the greater sciatic foramen; it then crosses the back of the tip of the ischial spine and enters the perineum through the lesser sciatic foramen. The artery then traverses the pudendal canal in the lateral wall of the ischio-rectal fossa and so crosses the obturator internus being situated about 4 cms. above the lower margin of the ischial tuberosity. It gradually approaches the margin of the ramus of the ischium and passes forwards deep to the perineal membrane; it then runs forwards along the margin of the inferior ramus of the pubis and at a distance of about 1.25 cms. behind the inferior pubic ligament it divides into the dorsal and deep arteries of the clitoris but it may pierce the perineal membrane before doing so. Its relations are as follows: Within the pelvis it lies in front of the piriformis, the sacral plexus of nerves and the inferior gluteal artery. As it crosses the ischial spine it is covered by the gluteus maximus; here the pudendal nerve lies medial, and the nerve to the obturator internus lateral to the vessel. In the perineum it lies on the lateral wall of the ischio-rectal fossa in the pudendal canal,

a special sheath of fascia overlying the fascia of the obturator internus. It is accompanied by a pair of venae comitantes and by the pudendal nerve; at first and then by its terminal branches in the dorsal nerve of the clitoris which lies above it and the perineal nerve which lies below it.

The branches of the internal pudendal artery which supply the external genital organs are: (1) The labial arteries. (2) The transverse perineal artery. (3) The artery of the bulb of the vestibule. (4) The deep artery of the clitoris. (5) Dorsal artery of the clitoris.

The labial arteries arise from the internal pudendal artery as it lies in the pudendal canal, cross either superficial or deep to the transversus perinei superficialis and run forwards in the interspace between the bulbo-spongiosus and ischio-cavernosus to both of which they supply branches and finally are distributed to the labia.

The transverse perineal artery arises from the internal pudendal artery just before it passes deep to the perineal membrane. It runs transversely on the cutaneous surface of the transversus perinei superficialis and anastomoses with the corresponding vessel of the other side. It supplies the transversus perinei superficialis and the structures between the anus and the bulb of the vestibule.

The artery of the bulb of the vestibule arises from the internal pudendal artery as it lies deep to the perineal membrane; it pierces the membrane and gives off branches which ramify in the bulb of the vestibule. It supplies a small branch to the greater vestibular glands.

The deep artery of the clitoris arises from the internal pudendal artery as it lies deep to the perineal membrane, it pierces the membrane and entering the crus clitoridis obliquely runs forwards in the centre of the corpus cavernosum clitoridis and supplies its erectile tissue.

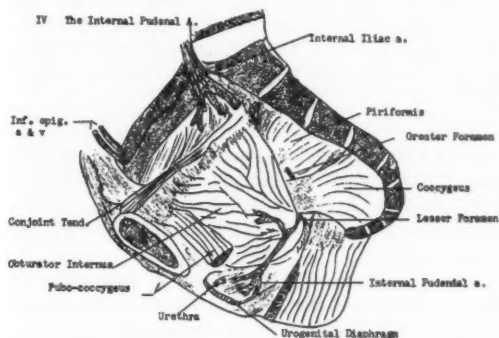
The dorsal artery of the clitoris pierces the perineal membrane and ascends between the crus clitoridis and the symphysis. It then passes between the two layers of the suspensory ligament of the clitoris and runs forwards on the dorsum of the clitoris, to supply the glans and prepuce of the clitoris. On the clitoris it lies between the dorsal nerve and dorsal vein, the former being on the lateral side. It supplies the skin and the fibrous sheath of the corpus cavernosum clitoridis sending branches through the sheath to anastomose with the deep artery of the clitoris.

The superficial external pudendal artery arises from the medial side of the femoral artery about 1 cm. below the inguinal ligament. After piercing the femoral sheath and the cribriform fascia it courses medially across the round ligament to be distributed to the skin of the lower part of the abdomen and the labium majus anastomosing with branches of the internal pudendal artery.

The deep external pudendal artery arises from the femoral artery about 3.5 cm. below the inguinal ligament passes medially across the pectineus and either in front or behind the adductor longus; it is covered by the fascia lata which it pierces at the medial side of the thigh and thereafter it is distributed to the skin of the labium majus and perineum.

The external genital organs are drained by the internal and external pudendal veins and the dorsal vein of the clitoris.

The internal pudendal veins are the venae comitantes of the internal pudendal artery. They begin in the vaginal plexuses, accompany the internal pudendal artery and unite to form a



V The Lymphatic Supply of the External Genitalia.



single vessel which ends in the internal iliac vein. They receive the labial veins and the veins from the bulb of the vestibule.

The external pudendal veins join the long saphenous vein near the saphenous opening. They drain a part of the labium majus.

The dorsal vein of the clitoris receives blood from the glans clitoridis and the corpus cavernosa clitoridis and courses backwards in the median plane between the dorsal arteries, it passes between the two parts of the suspensory ligament and then through an aperture between the inferior pubic ligament and the anterior margin of the perineal membrane to end in the vesical plexus.

The Lymphatics of the External Genitalia (Rouviere)

The Lymphatic Plexus of the Vulva—All of the cutaneous and mucous surfaces of the vulva contain an extremely rich lymphatic plexus composed of several layers superimposed on each other. They are continuous: laterally, with a lymphatic plexus on the lateral surface of the labia majora, and above, with the cutaneous lymphatic plexus of the mens pubis. These latter 2 plexuses are composed of larger and more numerous vessels than those of the mucous and cutaneous surfaces of the vulva.

The drainage of the lymphatic plexuses of the vulva is as follows: The vessels pass outwards in all directions from the periphery of the vulva. Those which supply the superior part pass vertically upwards to the mens pubis and then turn sharply laterally some to the right and others to the left to terminate in the medial members of the upper group of superficial, Inguinal lymph glands. Those vessels which pass outwards in the superficial and deep parts of the labia majora travel first superiorly along the lateral border of the labia majora and then are inclined laterally and superiorly to reach the same group of glands.

Some of the vessels from the vulva and labia majora may sometimes reach the lower group of Superficial inguinal lymph glands, but it is rare to see any of these lymphatic vessels reach the lateral group of glands. Bruhn has noted that this fact is of little importance since the superficial glands are interconnected by anastomosing channels so that the lymph of the vulvar region can run into the various glands of all the superficial inguinal groups.

The Lymphatics of the Clitoris—It is necessary to distinguish the lymphatic vessels of the corpora cavernosa from those of the glans clitoridis. Two or three lymphatic vessels leave the corpora cavernosa along the dorsal vein and thus reach the anterior aspect of the pubic symphysis. Here they may either divide into 2 branches which pass to the right and left or form a plexus which is drained by lateral branches. The lateral branches travel in the subcutaneous tissue anterior to the adductor longus to end in the medial members of the upper group of Superficial Inguinal lymph glands.

The vessels draining the glans clitoridis numbering 2-4 pass along the dorsum to form a pre-symphyseal plexus. The vessels draining this plexus follow two divergent pathways. (1) Inguinal. (2) Crurol. The former vessels travel superiorly to pierce the deep fascia to terminate either in the deep inguinal glands or in the internal retro-crurol gland. The latter is usually a single vessel which ascends along the round ligament to end in the external retro-crurol gland.

The lymphatics of the greater vestibular gland. Bruhn injected the excretory duct to a depth corresponding to that of the gland. He noted that in every case the liquid reached the inguinal glands particularly the medial members of the

upper group of superficial glands. The liquid never passed to the intrapelvic glands. He well realized that he did not know whether in all cases the injection was made into the gland or into the surrounding tissue.

Clinico-Pathological Conference

Deer Lodge Hospital

Mr. A. E. B., age 78, pensioned for arthritis, was admitted to Deer Lodge Hospital April 24, 1950, complaining of sudden loss of sight in left eye one week prior to admission. There were no associated symptoms.

O/E T.P.R. Normal.

Cataract right lens. Left fundus pale due to embolism of central artery of the retina. Heart not clinically enlarged. Rhythm regular. Rough first apical sound. Loud second aortic sound. No murmurs. BP 210/90. Peripheral vessels sclerotic.

Laboratory Findings:

Blood—W.B.C. 7,000, N. 74%, L. 26%, R.B.C. 3,200,000, Hgb. 65%, Sed. Rate 55 mm/hr.

Urine—50-60 pus. .08 gms.% albumin.

EKG—Left ventricular hypertrophy.

Chest x-ray—Aortic shadow is broadened and elongated. There would appear to be at least two ill-defined rounded shadows in the left mid and lower lung fields.

Treatment—Right extra capsular lens extraction.

Post-operative course complicated by bilateral thrombophlebitis and embolism or bronchopneumonia. Responded to therapy. While in hospital hemoglobin continued to fall and reached 56%, and suspecting G.I. malignancy investigation was carried out which proved to be negative. Cause of anemia was still undetermined in discharge on August 1. Throughout his hospital stay he consistently showed pus and albumin in his urine. Highest S.G. recorded was 1.025. B.U.N. fell from 38 mg.% to 16 mg.% at time of discharge.

Second Admission

September 20, 1950—returned for further ophthalmological treatment and was in hospital until Oct. 3, 1950. At this time Hgb. 62%, RBC 3,300,000, WBC 7,600, P. 76%, L. 23%, M. 1%, Sed. Rate 50 mm/hr. Was discharged without any consultation to Medicine. One smear showed 5 metamyelocytes, 80 polys, 15 lymphs.

Final Admission

Admitted May 7, 1952. Had been well until one year prior to admission when he began to have mid-abdominal pain, the nature of which is not described. Thought he may have had some

blood in his stools. Appetite fairly good. No urinary complaints.

O/E appeared chronically and severely ill. Skin and mucous membranes very pale. BP 130/65. Abdomen is very protuberant and fluid wave elicited. A large hard mass is present on the left and extends to the midline and to about 1½ inches above the iliac crest. Lateral and superior margins cannot be palpated but it has a distinct medial edge.

Laboratory—Serum Proteins: Alb. 3.1 gm.%, Glob. 2.4 gm.%. Liver Profile: T.T. 2 units, T.F. Neg. C.F.X., R.B.C. 2,700,000, Hgb. 50%, W.B.C. 8,000, P. 52%, L. 48%, Sed. Rate 35 mm. Urine: 30-40 pus. Alb. .14 gm.%, S.G. 1.012, B.U.N. 44 mg.%.

Bone Marrow: Erythropoiesis is normoblastic. Marrow elements are sparse. There are scattered, atypical cells that might be malignant metastatic cells.

E.K.G.: Incomplete R.B.B.B.

X-ray of abdomen: Irregular sclerosis and loss of trabecular pattern in both iliac bones, suggestive of Paget's disease.

Ba. Series: Could not be performed adequately and result unsatisfactory.

Condition deteriorated rapidly and became incontinent and required Kelly drainage. On May 20 became comatose. Temp. 102.3 by axilla. Pulse 100. Resp. 30 and shallow. Increased breath sounds right base and many rales. Died May 21, 1952, at 10.30 hours.

Autopsy Findings

General Description

The body is that of a white male weighing 104 pounds and measuring 5 feet 4 inches in length. The body is undernourished; the skin hangs loose, particularly over the upper extremities, thorax and abdomen. The scalp is covered with greyish, dark brown hair which is somewhat thin over the frontal area and the vertex. Both pupils are round and regular, the right measuring 2 mm and the left 3 mm in diameter. The mouth is edentulous.

There is nothing remarkable about the thorax. The abdomen is very lax and a fluid wave is easily elicited. A well healed surgical scar 10

cms. in length is present over McBurney's area. The genitalia are normal male. There is no palpable lymphadenopathy. There is nothing remarkable about the upper or lower extremities.

Thoracic Cavity

The left lung is bound down by adhesions at its extreme apex, but these are fairly easily broken down. The right lung has scattered adhesions over the whole surface of the lung, these are most marked in extent at the base.

The left lung weighs 310 gms. It feels soft and fluffy throughout. On section the lung appears normal.

The right lung weighs 420 gms. The apex of the upper lobe is soft and crepitant. The basal part of the upper lobe is firm and the pleura overlying it is thickened and white. The lower lobe is soft and crepitant in its upper portion but the basal segments are more firm. On section of the upper lobe the apical portion is normal. More basally, on section, there are three distinct areas: Posteriorly the lung is dark and rather reddish; immediately adjacent to this, and sharply circumscribed from it the lung is paler in color; in front of this, again, there is another area slightly darker than the middle and not so dark as the posterior one. The lower lobe on section is slightly darker than normal. No pus can be squeezed from the bronchioles.

Abdominal Cavity

The liver weighs 1730 gms. The gall bladder is shrunken and the wall thickened. The surface of the liver is rather pale, and the capsule is thickened. On section the liver is very pale and greasy.

The spleen weighs 1020 gms. The capsule is thickened throughout, in some places more than in others. The posterior border of the spleen is notched in 5 places. On section the spleen cuts with a gritty sensation and the organ is uniformly greyish red in appearance.

The left kidney weighs 110 gms. The surface of the kidney is very pale and finely granular, and the capsule strips with difficulty. There are a few small cortical cysts present. On cut surface the kidney is remarkably pale, and the cortex is thin with a thickness of 2-3 mm.

The right kidney weighs 100 gms. There is a large cortical cyst containing clear fluid at its upper pole measuring 3 cms. in diameter. Otherwise this kidney is similar to the right.

Microscopic Findings

Lungs—Show some carbon pigmentation and minimal bronchopneumonic infiltration.

Liver—Scattered throughout are areas of hematopoiesis. The cells vary greatly in type and some show mitosis.

Spleen—Shows hematopoiesis scattered throughout the spleen. Many multinucleated cells are

seen; also mitoses and nucleated red blood cells.

Kidneys—The cortex shows marked nephrosclerotic changes with many fibrosed glomeruli, round cell infiltration and dilated tubules filled with pink material. Arteriole walls are thickened and some of them appear necrotic.

Thyroid—Section shows one small area approximately 1 mm in diameter of densely-packed oval, dark-staining cells resembling tumor formation.

Sternum—Section shows very little marrow. The marrow spaces are filled with fibrous tissue and fat. No evident blood formation.

Spinal Marrow—Shows very little marrow. Most of the spaces being fibrous and fatty.

Diagnosis—Aplastic anaemia due to myelofibrosis.

Myelofibrosis

Myelofibrosis is a condition in which the blood forming elements of the bone marrow are replaced by fibrous tissue. It may be focal or generalized and it may or may not be associated with endosteal bone proliferation whence it is called myelosclerosis. The condition has been known since 1879 when it was reported by Heuch in Heidelberg, Germany. The disease results in varying degrees of extra-medullary myeloid metaplasia and a leuko-erythroblastic anemia.

The condition has been classified as either primary or idiopathic or secondary to various diseases. For a complete classification the reader is referred to the article of Erf and Herbert listed in the references.

Clinically, idiopathic myelofibrosis is a disease of adults affecting both sexes equally. It is characterized by an insidious onset of aching pains in the long bones for which no definite cause can be found. The symptoms of pallor, dyspnea on exertion and fatigue appear next. In the beginning physical examination may be normal but as the disease progresses lymph nodes are found to be enlarged and the liver and spleen become palpable. The blood picture shows a hypochromic anemia with immature red cells in the blood stream. There may be a moderate increase in the total number of white blood cells in the beginning but as the condition progresses a leukopenia appears. There is a marked polymorphonuclear shift to the left as far as the myelocytes. This combination of an anemia with immature red cells and the leukemoid blood reaction is referred to as a leuko-erythroblastic anemia. On sternal puncture the bone marrow is aspirated with difficulty, and is definitely hypoplastic. The anemia is refractory to treatment. Once the symptoms and signs are well established the course is usually rapidly downhill. The enlargement of the lymph glands, spleen and liver, which is due to an extra medullary myeloid metaplasia becomes more pronounced and the anemia worsens. Death is due

to gradual exhaustion and intercurrent infection. The secondary type is characterized clinically by the disease process responsible for, or associated with, the fibrosis of the marrow.

The essential pathological lesion is in the bone marrow and in each suspected case, a bone marrow biopsy is essential for diagnosis. The areas of extra-medullary hematopoiesis also show characteristic changes.

The marrow shows a diffuse hypoplasia of all the marrow elements. There gradually appears an increase in the reticulum at first in the form of fine fibrils but later becoming collagenous and densely fibrotic. The vessels in the marrow which are normally numerous and thin-walled become inconspicuous. Scattered between the fibrous tissue strands are foci of regular or greatly hyperplastic hematopoiesis which usually contain both myelogenous and erythrocytic cells. Although megakaryocytes ordinarily are not increased they may be so numerous sometimes as to overshadow all other elements.

The development of extra medullary sites of blood formation appears to be a compensatory mechanism and entirely dependent upon the degree of myelofibrosis. The organs most frequently

involved are the liver and spleen although lymph nodes, kidney and lung have also been involved in some cases. The liver and spleen may be enlarged to huge proportions. Microscopically there are foci of myelocytic and erythrocytic cells throughout the organs.

The etiology of this syndrome is mixed and many agents have been implicated. The use of extrinsic toxic agents such as benzene and fluorine over long periods of time has been elicited in histories of some proved cases. It has also been seen in patients with post-necrotic cirrhosis of the liver following chronic hemorrhage or hemolysis following x-ray therapy and as the end stage of polycythemia vera.

Patients with myelofibrosis can live for many years. They are, however, prone to infections which, in most cases, is the usual cause of death. Treatment is purely supportive in the idiopathic variety and in the secondary forms, treatment of the associated disease causing the fibrosis. Splenectomy is absolutely contra-indicated.

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Mr. W. V. R. Age 45.

This patient was born in Canada in 1907 and served with the Canadian Army (in Canada) 1939-45. Worked intermittently for C.N.R. as a time-keeper. Was apparently an alcoholic but there is no definite history as to when this began.

Past Illnesses:

1917—Smallpox.

1926—Ruptured appendix.

1944—Apparently some G.I. trouble as Ba Series was done—reported negative. Discharged, categorized E4.

1945—Developed lichen simplex chronicus of ankles.

June, 1951—Seen in O.P.D. Deer Lodge Hospital. C/o pain left foot—ineligible and transferred to W.G.H. where he gave the following history:

Pain in right foot started October, 1950, and caused him to quit work. Pain described as lancinating, worse with walking, and relieved by rest; residual ache and gradually cleared up over a period of 5 months. Now had developed some trouble on left side since April, 1951. Also complained of anorexia for years and nervous stomach. Positive physical findings were:

Marked arcus senilis; BP 100/65; Sensory loss, pin prick over left foot and on lateral side of right foot;

Knee jerks and ankle jerks were absent;

Other reflexes present and diminished.

E.K.G. posterior infarct relatively recent.

Hgb 70% and 74%.

Cephalin Flocculation XXX; Thymol Turbidity —.05%; Alkaline Phosphatase 17.2 K-A units; Proteins—T.P. 4.2; Alb. 2.3; Glob. 1.9.

Improved on no specific therapy and was discharged September, 1951, with diagnosis of alcoholic peripheral neuritis, old post. infarct, evidence of liver damage.

January, 1952—In Deer Lodge Hospital for pensions examination re repeated pulmonary episodes, also complained of abdominal cramps past 10 days and pains in left leg which were not troublesome at this time. Positive findings at this time were: appearance of pre-aging; reflexes brisk, sensation to pin prick normal, absent pulsations in both D.P. & P.T. and left femoral artery. BP 115/80—feet cold—bluish tinge—fundi normal for age.

Investigation shows:

Ba. Series with air contrast—diffuse polyposis of stomach.

Gastroscopy not successful—stomach could not be inflated.

T.T. 4 units; T.F. XXX; C.F. XX; T.A. Neg.

Chest x-ray—elongation of aorta, otherwise negative.

February, 1952—Discharged. Pensions ruling gastric polyposis 2/5 aggravated during service.

February 12, 1952—Admitted W.G.H. with history of abdominal cramps 30 hours progressively severe, and laparotomy was done. Terminal 18" of ileum gangrenous due to volvulus around a pelvic adhesion—bowel resected and ileo-transverse anastomosis done. Path Report: Extensive infarction of small bowel. Discharged after 6 weeks.

April 19, 1952—Admitted D.L.H. with diarrhoea and while in hospital developed a superficial phlebitis and pulmonary infarct. Treated with penicillin and anti-coagulants. Infiltration in left lower lung field disappeared in 3 weeks. Became a disciplinary problem and was discharged Aug. 1, 1952.

Lab. Results:

Urine: occ. Alb. .01 - .02—negative, one occasion loaded with R.B.C.

Liver Profile: Normal.

Proteins: T.P. 4.3 gm%; Alb. 2.0 gm%; Glob. 2.3 gm% alpha .5 gm%; beta .7 gm% gamma 1.1 gm%.

August 31, 1952—Admitted D.L.H. generalized abdominal pain 6 days. Vomiting, hiccoughs, dehydrated, abdomen generally tender. Given I.V. fluids and sedation. Impression: gastritis.

September 1, 1952—Dyspneic, pain in left lower chest and both legs, abdominal cramps, cyanosis, grunting respirations. A pleural rub and creps were heard over left chest. O₂ started.

6 p.m., semi-comatose, tachypnea, pulmonary oedema.

September 2, 1952—Dullness lower half of left chest and lower third of right chest. T. 103, P. 110, R. 35, comatose, cyanotic, coarse rales bilateral, plantars down.

Died 9.40 a.m.

Autopsy

General Description:

The body is that of a 45-year-old white male, weighing 120 pounds, and measuring 5 feet 9 inches in length, who looks much older than his stated age. The lower abdomen is protuberant. There is a right paramedian surgical scar which is well-healed, measuring 18 cms., and a McBurney's scar, also well-healed, measuring 9 cms.

Positive Pathological Findings:

The right lung weighs 1240 grams. The lower lobe is consolidated, intensely purple; the upper and middle lobes contain relatively little air. On section, greenish pus pours from the surface of the lung which is solid and appears to be breaking down in areas. Culture is taken and grew hemolytic staphylococcus aureus, coagulase positive and B. coli.

The left lung weighs 1400 grams, and is solid except for the apex of the upper lobe which con-

tains air. The cut surface is like that of the right lung. The left lower lobe has been fixed en masse.

The heart weighs 350 grams and is soft.

The aortic valve shows fusion of the anterior and posterior cusps at the commissure, and at the point of fusion there is early fibrosis and a vegetation about 5 mms. high and 7 mms. in circumference. The left coronary artery is patent throughout its length. The right coronary artery contains a thrombus about half-way down its length. The posterior wall of the left ventricle at the apex and adjacent to the septum shows a diffuse fibrosis of the myocardium. The aortic valve has been saved for further sectioning.

The liver weighs 2150 grams and is soft. The cut surface is very pale and greasy.

The right kidney weighs 150 grams and is much smaller in size than the left kidney. Its surface is markedly lobulated and also contains a few cortical cysts. On stripping the capsule, there are numerous depressed scar-like areas in the cortex. On section, the cortex over these areas measures about 2 mms. but appears normal in the remaining areas. The medulla is congested in contrast to the pale cortex.

The stomach is large and on opening the stomach, there are giant rugae. There are no pedunculated rugae and the stomach has the appearance of an advanced hypertrophic gastritis.

The ileum has been anastomosed to the transverse colon, and the caecum is blind and markedly adherent to the right lower quadrant. The site of the anastomosis is widely patent.

The aorta shows minimal atheroma. However, at the bifurcation of the left common iliac, there is a partially recanalized occlusion of the vessel.

Microscopic:

Heart: Section shows extensive replacement of the myocardium by fibrosis with hypertrophy of the remaining fibres.

Aortic Valve Vegetation: Section shows a necrotic lamellated vegetation with some areas of commencing calcification, much of it is hyaline.

Lungs—Right: Section shows widespread filling of the alveoli with polymorph leucocytes. Lobar pneumonia. **Left:** Section resembled the right.

Liver: Section shows almost complete destruction of the parenchyma by parenchymatous and fatty degeneration.

Kidneys—Left: Section shows some vacuolation of the tubular epithelium. **Right:** Section shows areas of scarring of the parenchyma with complete obliteration of the tubules resembling a healed pyelonephritis.

Stomach: Section shows marked hypertrophy of the mucosal rugae.

Iliac Vein: Section shows lumen blocked by thrombus.

Alcoholism and Fatty Liver

Classification: There are various types of fatty liver, each due to a specific etiological abnormality. They may be due to:

- A. Dietary Abnormalities:
 - 1. Obesity.
 - 2. Starvation.
 - 3. Alcoholism.
- B. Hormonal Imbalances:
 - 1. Insulin deficiency.
 - 2. Hypothyroidism.
 - 3. Anterior pituitary lobe stimulation.
- C. Oxygen Lack:
 - 1. Anemia or ischemia of liver cells.
- D. Toxic or Infective Processes:
 - 1. Phosphorous.
 - 2. CCl₄.
 - 3. Infective hepatitis.
 - 4. Wilson's Disease, etc.

The condition is brought about by one of two possible abnormalities:

(a) There is an increase in the amount of fat supplied to the liver with production of a fatty liver; or

(b) There is a decrease in the rate at which the liver is able to dispose of fat with production of the same visible picture.

In alcoholics, the habits induced by the consumption of large amount of alcohol are the most important factor in the production of fatty liver which may pass on to cirrhosis. These people develop dietary fatty livers due to their starvation or restricted diet, especially in animal proteins, which removed the lipotropic substances or their necessary precursors.

Mechanism of Production of Fatty Liver:

Fat is transported as phospholipids and their production requires choline in the molecule. If this substance or the precursors, methionine, cysteine, or betine are not available, neutral fat tends to collect in the hepatic cells.

In starvation of alcoholism, there is increased mobilization of depot fat which is transported to the liver where it tends to remain because of a lack of these specific factors.

Changes in the Liver:

Experimentally, fat in the liver has been demonstrated in animals on a lipotrope deficient diet within 24 hours and within one week all the liver cells are distended with fat. This process commences around the central vein area.

The fat first appears as small intercellular globules which coalesce and increase in size, compressing the nucleus of the hepatic cell and stretching the cell membrane. Larger and larger fatty cysts are formed by rupture of cell membranes with fusion of adjacent globules. This process reaches a stage where the fat either ruptures (1)

into a bile radical and reaches the gut, or

(2) into a sinusoid with production of fat emboli in various organs. Emptying of the cyst causes the wall to collapse and the reticulum framework to be approximated. If the precipitating cause persists, the nuclei of the parenchymal cells degenerate with the resultant microscopic appearance of cirrhosis.

When lipotropic substances are given, the intact cells rapidly get rid of their accumulated fat. The cysts show slower disappearance of fat as the compressed nuclei regenerate to form normal hepatic cells.

In man, liver biopsy studies have been carried out on alcoholics, and progress under controlled dietary conditions have been observed. Disappearance of fat with regeneration of hepatic cells has occurred.

The Action of Lipotropes:

The action of choline and methionine in preventing or curing fatty infiltration in cases with low protein diets is believed to result from the increased turnover of phospholipids in the liver. It has been shown by use of radioactive phosphorous, that the rate of phospholipid synthesis is increased by the use of methionine or choline. This increase is only transient and the effect limited. Their use is of value only at the beginning of treatment, for after that, the dietary constituents are sufficient for the substances.

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Gastritis

Gastritis has been considered by some to be one of the commonest lesions of the stomach. Probably the commonest form of gastritis is the post-alcoholic gastritis—first described in Beaumont's observations of St. Martin's stomach after an alcoholic debauch.

Of the specific forms of gastritis, little comment is necessary. Fixation of the gastric mucosa occurs in carbolic acid poisoning while softening and perforation are seen with ingestion of strong acids and the caustic alkalis. Suppurative gastritis is a rare event, sometimes terminating carcinoma with violent inflammation and necrosis, Luetic and tuberculous gastritis may be mentioned as pathological curiosities.

Chronic gastritis of various types is however being diagnosed with increasing frequency especially since the advent of the gastroscope. This falls into three main groups; atrophic, hypertrophic and superficial; and these forms may be localized or diffuse.

Atrophic Gastritis:

This is the type associated with P.A. in relapse, severe sprue, and also seen as a primary condition. Grossly, the mucosa is thin and seen through the gastroscope appears as greying of the normal orange-colored mucosa with prominence of the submucosal blood vessels.

Hypertrophic Gastritis:

Thickening of the mucosa and nodularity characterize this form which microscopically shows an infiltration with lymphocytes and plasma cells. Massive gastro-intestinal haemorrhage has occurred from this type of mucosa.

Superficial Gastritis:

Numerous subdivisions of superficial gastritis are made by Schindler, depending on the gastroscopic picture, i.e., predominance of haemorrhage, oedema, superficial ulceration, etc. Usually the mucosa appears oedematous with irregular coloration and adherent patches of thick grey mucous.

Schindler's gastroscopic study of one hundred Chicago alcoholics would seem pertinent to the case under discussion. These patients averaged

2.8 pints of alcohol (whiskey, canned heat, mule antiseptics, etc.) daily for 20 years, and in 55 the stomach appeared normal! Of the abnormal stomachs, 22 showed superficial gastritis, 13 atrophic gastritis, 8 combinations of these two, and only 2 patients showed hypertrophic mucosa. Many of these patients had vitamin deficiency, especially B and C, but no correlation existed between Avitaminosis and Gastritis as many of the deficient patients had normal mucosa. Similarly, no correlation was found regarding tobacco or dental sepsis.

Gastric Polyps:

Eighty cases were described by Carey and Hay of which 5 were malignant, 4 of the 5 occurring in stomachs with atrophic mucosa, and all malignant cases showing histamine achlorhydria. Diffuse gastric polyposis is considered by Boyd to be a true neoplasia with an adenomatous formation of new glands with malignant potentiality.

References

1. Gastric Polyps—Gastro-Enterology: Jan., 1948.
2. Gastric Mucosa of Chronic Alcoholic Addicts: J.A.M.A., Sept., 1949.
3. Boyd's Pathology.

Anaesthesiology

Abstract

The Use of Procaine in Peripheral Vascular Disease. Current Researches in Anaesthesia and Analgesia, Hyman D. Stein, 31: May-June, 1952, 203.

Twenty-five elderly patients with occlusive vascular disease were treated with 1000 ccs. of saline solution or 5% glucose in distilled water containing 0.5% procaine, as daily infusions over a ten-day period. Results were assessed on subjective changes in sensation, i.e., comfort, disappearance of pain, feeling of warmth and improvement in appearance of gangrenous areas when present.

There were three groups of patients:

1. Arteriosclerosis Obliterans—15 cases. All but one had relief of pain at the end of the three-day period. Six of these, at the end of a six month period, still had no pain.

2. Diabetic Gangrene—7 patients. Response in this group was not as good. However, several patients with a wet gangrenous toe, after completion of the course, had a dry painless gangrene.

3. Arteriosclerosis Obliterans with Ulceration—3 cases. Definite improvement with regard to pain was noted in two patients, with early improvement in the size of the ulceration.

This article is only a preliminary report, but the good results noted make this above-mentioned method a worthwhile attempt in alleviating the pain of these discouraged, unhappy people.

M. Minuck, M.D.

Article

The Price of Health

Arthur Kelly, M.B.

Deputy General Secretary, Canadian Medical Association

When my colleagues in Manitoba did me the honour of inviting me to address a public meeting, they indicated that it might interest you to hear some observations on the economics of medicine or the cost of medical care. Interesting as these subjects may be, I rejected them in favour of a broader concept, which I have entitled "The Price of Health," because I sincerely believe that good health should be our objective and to attain it, much more than the services of doctors or hospitals is involved.

The preamble to the constitution of the World Health Organization defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." We are in the habit of referring to such a state as one of "positive health." I'm afraid that our stress on the completeness and indivisibility of health produces in the minds of some people a picture of an octogenarian leaping over a fence to demonstrate his positive health or the bulging muscles of a female weight-lifter. My own idea of health is a much milder and more prosaic one and consists briefly of a state of well-being in which we are unconscious of, or at least not unduly preoccupied with our bodies because they are able to meet the demands we make on them; an emotional equilibrium in which we react to the stresses of daily living without serious psychological upset and a state of adjustment to our society which renders us useful units of the social group while retaining those precious attributes which distinguish us as individuals.

To attain such an ideal state demands a price. I wish I had some familiar quotation to summarize the situation. "The wages of sin is death—the gift of God is eternal life." "Eternal vigilance is the price of freedom"—both of these sayings come to mind and both have some contribution to make to the idea I am trying to develop even though they do not precisely fit the case.

Health may be regarded as a favourable state of equilibrium with our environment and to achieve and maintain that somewhat uneasy equilibrium demands a price which we must all be prepared to pay. Let me at once state that doctors and doctoring represent only a small part of the picture, indeed the need for such services is frequently only evident when we have temporarily lost the battle for health. To illustrate what I mean, I would quote from the Statement of Policy of the Canadian Medical Association.

"Among the factors essential to the people's health are adequate nutrition, good housing and

environmental conditions generally, facilities for education, exercise and leisure; and not least, wise and sensible conduct of the individual and his acceptance of personal responsibility."

Here set out are the fundamentals which provide the background for improvements in health. We in this fortunate country are apt to take them for granted—food—shelter—schools—work—play. I would particularly like to call attention to the last clause, "... not least, wise and sensible conduct of the individual and his acceptance of personal responsibility." We are all to some degree the guardians of our own health. Many examples can be quoted of the effect of unwise personal habits on health, but it is not this feature which I desire to stress but to point out the obligation of each of us to learn and to apply the knowledge which will help us to maintain our health. For example, though we live in a land of plenty, unless we study the simple rules of good nutrition and utilize this knowledge in our daily meals, we are not doing our part to keep healthy. Similarly, it is useless to a child that effective means of preventing many diseases by immunization have been developed, if mothers and fathers do not make the effort to accept them and have them applied to their own families.

One of the factors, then, in the price of health is to inform oneself and to make the personal effort required to apply this knowledge in everyday life.

There are, in addition, certain activities which contribute materially to our health that we have found to be best applied on a community basis. This, in Canada, represents that large area of preventive services which have developed as the field of local government and which we refer to as Public Health. Traditionally, these services are preventive in character and are designed to protect us collectively from a potentially hostile environment. The provision of pure water, safe food, sanitary facilities, protection against epidemic disease are fundamental to a sound public health programme and additional services in mental hygiene, health education, school medical services and related fields are becoming recognized as a community responsibility.

The provision of these services so essential to our health costs money and we pay for them through our taxes. They represent perhaps the greatest bargain of the ages in terms of financial outlay as compared with benefits received. You residents of the city of Winnipeg and the province of Manitoba may be interested in some figures which illustrate the expenditures of your city and provincial health departments.

In the city of Winnipeg, the annual per capita expenditure for preventive health services is \$1.25. For a dollar and a quarter for every man, woman and child in this city, your Health Department provides services in Administration and Statistics, communicable disease control, inspection and laboratory services, child medical and dental services and nursing services. The results of the efforts of your Health Department for this modest outlay should be better known to you all because you are enjoying the benefits in terms of better health every day and the figures for morbidity and mortality reflect great credit on your community.

In the Province of Manitoba an examination of the estimates for the current year show that approximately \$3.81 per capita will be spent on preventive health services. For this amount you are provided with "the administration of an efficient Department of Health and Public Welfare, services in sanitation, public health engineering, food control, industrial hygiene, communicable disease control, tuberculosis control, maternal and child hygiene, public health nursing, assistance to local health units and diagnostic units and a provincial laboratory.

You and I are inclined to regard such services as essential to a civilized community and so they are. They are, however, related to our ability to pay for them and so they constitute another factor in the price of health. The relationship between economics and health is strikingly illustrated in a table quoted in a recent World Health Organization publication, showing that the picture is quite different in many parts of the world. An arbitrary division of the countries of the globe into

Developed Areas	Intermediate Areas	Undeveloped Areas
World Population 1/5	1/6	2/3
Income Per Capita \$500	\$155	\$41
Food Supply 3,000 calories	2,700 calories	2,100 calories
Doctor per 100,000 population 106	78	17
Life Expectancy at Birth 63 years	52 years	30 years

The next important factor in the price of health which I would have you consider, relates to the provision of personal medical services. It is hardly necessary to state that the developments in the field of scientific medicine of the first half of the current century have surpassed the progress made in several preceding centuries. Research, the development of new and powerful remedies, the rise of hospitals and surgery, the elaboration of complex diagnostic procedures in laboratory and x-ray departments, have all contributed to the conquest of many disease. A measure of the advances which have been made may be made by comparing the median age at death of Canadians which in 1901 was 21.7 years with the figure of 67 years which applied in 1951.

Your doctor is the heir to all of this progress and the service which he is able to render is a

far cry from that of his recent professional forbear, the horse and buggy doctor with his little black bag. The application of all of this new knowledge is, however, an expensive process and to make it available requires a re-examination of the methods of financing medical care.

People are very apt to assume that their private expenditures for personal health services represent mainly payments to doctors. Nothing could be further from the truth. An analysis of expenditures made in the United States and taken from Department of Commerce figures show that the "medical dollar" in 1950 was expended as follows: Physicians 28c, Hospitals 23c, Drugs 17c, Dentists 12c, other miscellaneous health expenditure, 20c. Over a 20-year period the physicians share of the medical dollars actually declined 12%.

The application of the insurance principle to the budgeting of the cost of medical services is a device which has interested many serious students of the problem. My own Association and its provincial divisions, have taken the lead in this country in establishing what we are pleased to call plans of voluntary prepaid medical care. A well-known and excellent example of this is Manitoba Medical Services which operates in this province. Under this plan, groups of subscribers, more recently individual subscribers, pay contributions into a fund which entitles them to the services of doctors when they require it. The current cost of this service under the group plan is \$2.50 per month for an individual and \$6.00 per month for a family of any size. At January 1st, 1952, over 1,500,000 Canadians were covered by medically sponsored plans of this type and this figure represented an increase of 25% over the previous year. Additional thousands of Canadians are covered under indemnity policies written by insurance companies and co-operative organizations and the coverage by Blue Cross is very extensive in its own field of hospital insurance.

Although accurate figures are very difficult to assemble and duplication of benefits hard to eliminate, there was recently compiled the following table which shows the extent of coverage by voluntary agencies in Canada:

Hospital Expense Benefits	5,150,000
Surgical Expense Benefits	3,385,000
Medical Expense Benefits	2,440,000

In addition to demonstrating that a substantial proportion of our population is now covered in various voluntary plans by their own efforts, the figures show a rising curve of enrolment which is very encouraging to those who favour this approach to the solution of the problem of financing medical care.

There are those, however, who feel that coverage by voluntary means is inadequate and that compulsory health insurance under Government auspices is the answer to our needs. Such a view-

point is a legitimate one and it finds examples in the experience of several European countries where the concept of the Welfare State has found greater support than it has, to date, in Canada. I would not minimize for a moment the interest of our own Governments, both Federal and Provincial in the possibility of universal compulsory coverage for all citizens. Indeed one has only to look at the provinces of Saskatchewan and British Columbia to see plans of universal compulsory coverage for hospitalization, which have operated for as long as six years in one instance.

It has been my privilege to spend some time in the United Kingdom studying the National Health Service in operation and while it is quite unfair to summarize one's impressions in a brief and dogmatic statement, I would remark that I think that the pattern of medical services which has developed under that plan of compulsory health insurance is unsuitable for adoption in Canada.

It will be evident to you that the provision of a comprehensive plan of health services is a very complex undertaking involving the provision of services and facilities which are skilled, expensive and in some cases in short supply. When groups of our citizens pass resolutions "demanding" the institution of compulsory health insurance and even inferring that this is synonymous with free medical care I get the impression that they are inadequately informed on the issues involved. When it is suggested that this be made a matter for decision in the heat of an election campaign, I feel that they are advocating a course which is far removed from the serious study which should be given to such an important matter.

I seem to be wandering from the main theme of my remarks and I will return to a consideration of cost in relation to universal compulsory health insurance as another facet of the price of health.

No responsible person has any reasonably accurate idea of the cost of compulsory health insurance in this country and the experience of other countries suggests that costs tend to rise progressively and that they are largely uncontrollable. For example, just prior to the inauguration of the National Health Service in Great Britain, it was estimated that the total annual cost would be £165 million. Three years after the start of the plan, the annual cost was in excess of £400 million.

To come closer to home, in 1945 the Federal Government in its proposals to the Provinces estimated the per capita cost of the hospitalization benefit to be \$3.60 per person per year. In 1946 this figure was amended to \$4.60 per capita by some juggling with the proposed remuneration for general practitioner services. Since that time, we have had the benefit of the experience of two provinces, Saskatchewan and British Columbia, in the field of compulsory hospital care insurance and the latest figures indicate that the per capita cost of

this benefit actually was \$15.19 in Saskatchewan and \$17.50 in British Columbia. Quite apart from the increase in hospital costs between 1945 and the present, these figures indicate the impossibility of predicting outlay in the health field when benefits are universally available.

In 1945 the Government of Canada estimated that \$21.60 per capita per annum would be the cost of providing a full scale health and hospital insurance programme or approximately \$250 million for the country. The experience of the voluntary plans of prepaid medical care, Blue Cross and the compulsory hospital plans in Saskatchewan and British Columbia all suggest that these figures are quite unrealistic and that costs three times as great would be closer to the actual figures. No accurate prediction of demand, and consequently of costs, can be made in relation to a comprehensive, universal, compulsory medical and hospital care plan. Any Government embarking on such a course is indulging in a financial adventure with unknown consequences.

You may well ask for a plain exposition of the views of the medical profession of this country on this issue and I would read further from the Statement of Policy of the Canadian Medical Association:

"The Canadian Medical Association, having approved the adoption of the principle of health insurance, and having seen demonstrated the practical application of this principle in the establishment of voluntary prepaid medical care plans, now proposes:

(a) The establishment and/or extension of these Plans to cover Canada.

(b) The right of every Canadian citizen to insure under these plans.

(c) The provision by the State of the Health Insurance premium, in whole or in part, for those persons who are adjudged to be unable to provide these premiums for themselves."

In my remarks this evening I have attempted to outline for you certain views of my own on a subject which is of great concern to all of us. I have undertaken to stress that the Price of Health demands payment from you and me in our personal responsibilities, and as citizens and taxpayers of a community. That the provision of personal health services can be undertaken by the application of insurance principles and the voluntary and compulsory approaches are possible.

As a representative of the Canadian Medical Association, I would close by assuring you that the doctors of this country are, perhaps more than any other class in the community, concerned with maintaining and extending the progress which our profession has made, to the end that the Canadian people will have health more abundantly than ever before.



Our President 1952 - 1953

Cornelius W. Wiebe was born at Altona, Manitoba, where he attended public and high schools.

A member of the teaching profession for seven years, Dr. Wiebe realized a childhood ambition when he graduated in medicine from the University of Manitoba in 1925. Following graduation, Dr. Wiebe commenced his practice at Winkler, Manitoba.

Dr. Wiebe brings to the office of the President a wealth of experience attained in public service — a member of the Provincial Legislature from 1932 to 1936, also an active member of the Winkler School Trustees Association for many years. In 1942 Dr. Wiebe became a member of the Council of the College of Physicians and Surgeons of Manitoba, and served as President of the College in 1945-46. These activities did not, however, prevent him from attending numerous short courses related to his medical field of interest, obstetrics.

A family man, our new President has two sons and two daughters. The youngest son, Howard, is attending United College.



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Historical

45 Years Ago

From the Western Canada Medical Journal

Vol. I, No. 12, completes the first full year of publication of this pioneer journal, bringing 1907 to a close. Nowhere in this number do we find any reference to the journal's having achieved the initial success that must have been obvious to the editor.

The leading article is "Peptic Ulcer of the Oesophagus and Duodenum" (sic) by Prof. C. A. Ewald, Physician to the Augusta Hospital, Berlin, Germany. X-ray is not mentioned as an aid to diagnosis. Treatment consists primarily of nutrient enemata because "gastric ulcers heal more quickly and more smoothly in proportion as the mucous membrane or rather the muscularis, can contract, i.e. the less the stomach is burdened and stretched by food." Surgery was indicated where stenosis had occurred and consisted either of severance of adhesions or gastro-enterostomy.

"Aortic Regurgitation," by T. K. Munro, M.A., M.D., F.F.P.S., Glasgow, was a post-graduate lecture delivered at the Glasgow Infirmary in February, 1907.

"The Relation of Mind and Body," by Alfred T. Schofield, M.D., Hon. Physician, Freidenheim Hospital, London, Eng., advocates a return from the then all too current tendency to ignore the psyche as a factor in disease.

An unsigned report on "The Use of Antistreptococcic Serum," appears from the pen of a rather annoyed, alarmed and disgusted doctor who had recently given himself a shot of serum and promptly developed a terrific anaphylactic reaction. His closing remark—"I know that in the future I shall be afraid to use it, and will not do so unless it is advised in consultation."

An editorial comments on the formation of the Winnipeg Clinical Society "the object of which is to make use of clinical material on hand." The organization meeting was held at Dr. F. W. E. Burnham's office, 373 Broadway. Dr. T. M. Milroy was elected the first president with Dr. W. R. Nichols, vice-president; Dr. J. E. Lehmann, Treasurer; Dr. C. T. Sharpe, Secretary.

This makes the third local medical society to be noted in the City, the others previously referred to being the Winnipeg Medical Association and the Winnipeg Medico-Chirurgical Society. Were all three to amalgamate later to form the Winnipeg Medical Society?

"The Winnipeg Medical Association met Dec. 6th. A paper on 'The Origin of the Islands of Langerhans in the Pancreas,' was read by Dr. Swale Vincent. Dr. Gunn presented a case of

leprosy of eight years standing in a Galician boy of 14 years of age."

Vital Statistics of Regina, April 1st to Nov. 30th, "Typhoid Fever 145, all other contagious diseases, 61."

"Tests are being made at Ninette—the site chosen for Manitoba Sanitarium—as to the quality of the water required for drinking purposes."

"Born—McKenzie—on Nov. 4th, at Winnipeg the wife of Dr. C. A. McKenzie, of a daughter."

"Married—Campbell-Hogg—at Knox Church, Winnipeg, Dr. Alexander M. Campbell of Winnipeg was married to Miss Annie Josephine Hogg, daughter of the late Rev. Joseph Hogg. Dr. and Mrs. Campbell left for a visit to St. Paul, Chicago and other cities, and will take up residence on Sherbrooke Street on their return"—(? where Dr. Campbell still resides?)

Although the Editor failed to publish his assessment of the progress made by his journal in its first year, your reviewer feels some summary of achievement is appropriate. It is noted that Vol. I ran to some 576 pages of copy. How does this compare with other medical journals of the day? And, for that matter, what were the other journals then currently published in Canada?

To combine the answers to both questions, the foremost journal then published in Canada was the Montreal Medical Journal, founded in 1871. In 1907, after 36 years of a successful career, it turned out 880 pages. The folios of both journals were comparable in size but the front of the Montreal publication was larger than that of the Western Journal so one imagines the actual material amounted to almost the same quantity in both publications. For a newly born journal on the far removed prairies to approach the bulk of an ancient dignified and firmly enrooted periodical in the East must indeed demand our admiration. The first volume of the Canadian Medical Journal founded in 1911 and backed by the Dominion wide Canadian Medical Association could muster only 1227 pages of identical size. So our Western Canada Medical Journal had obviously leaped to a thriving prosperity in the very first year of its existence.

One has searched in vain for comment or notices on the first appearance of the Western publication in the pages of its sister magazines. However, the Montreal Medical Journal for 1907, page 705, announces "There are now in Canada 6,000 physicians for 7 journals in English and 3 in French." By inference, the remaining six English journals must have been the following, namely:

- (1) The Canada Lancet, founded 1866.
- (2) The Canadian Practitioner and Review, 1875.
- (3) The Maritime Medical News, 1888.

- (4) The Canadian Journal of Medicine and Surgery, 1897.
- (5) The Dominion Medical monthly? date, and
- (6) The Western Canada Medical Journal, 1907.

How many others had at one time been published remains a mystery. Incidentally, Nos. (1) and (2), combined and later absorbed (5) in 1925, only to be gobbled by (4) which expired in 1936. The Montreal Medical Journal and the Maritime Medical News both ceased publication on the surrender of their goodwill to the new formed Canadian Medical Journal in 1911.

Had there been previous medical journals published in the West? The Medical library of the University of Manitoba has so far yielded only one publication of this sort. It is an incomplete set of "The Annual Journal of the Winnipeg Medico-Chirurgical Society." Volume I covered 1904-05, Volume II (for 1905-06) is missing, Volume III for 1906-08, and Volume IV for 1908-09, are all we possess.

While no attempt will be made to trace the development of the medical press generally in the West, an exception as an aside, is to mention the Western Medical News, first published in Regina, in 1909 and its Editor, who founded it—you couldn't guess, none other than our old friend Dr. Harry Morell, who from April to August of 1907 was the managing editor of the Western Canada Medical Journal. One copy only of the Regina journal is to be found in our library and that is Vol. X, No. XI, for June, 1919. Its editor in chief?—Capt. Harry Morell, C.A.M.C. By inference this journal was in existence in 1921 but had disappeared by 1925. It is believed to have merged with the Saskatchewan Medical Journal, founded 1920.

An index to Volume I of the Western Canada Medical Journal would feature some of the most outstanding medical authors of the times. The 12 issues carried 35 leading articles, of which 14 emanated from the British Isles, 2 from the United States, one each from Germany, France and Italy. They include papers by Sir. Wm. Osler, Sir James MacKenzie and A. J. Ochsner. And when it is recalled that nearly all these papers were original, prepared for first publication in the Journal, it must be admitted that the Editor was indeed a man of outstanding ability and of wide professional contacts.

Biographical data available on this remarkable man, George Osborne Hughes, M.D., are somewhat sketchy. We know that he was born on the 4th of July, 1870, at Anglesey, Wales, the son of the Reverend William Hughes. How he came to obtain his degree of M.D. from the University of Virginia in 1897 we do not know, but he appears to have

shortly returned to England, and following a period of study at University College, London, Vienna and Berlin, he obtained the conjoined degrees of M.R.C.S. (Eng.), L.R.C.P. (Lond.) in 1899. It seems likely that in his post-graduate days he came into contact with many of the then outstanding clinicians, on whom he was subsequently to call for contributions to the Journal.

He first registered in Manitoba in 1905, though his first payment of annual fees to the College of Physicians and Surgeons is recorded on Jan. 1st, 1907. Does this indicate the difficulties of becoming financially solvent on entering practice in those days or does it betoken a good natured laxity on the part of the treasurer? As to why he elected to settle in Winnipeg, we shall probably never know. We do know he practised in offices located in the Commonwealth Block and that he was married and resided at Suite 2, Section B, Fort Garry Court, Winnipeg.

That his Journal was probably a successful financial venture, at least during its first year of existence, may be inferred from the fact that Volume 12, for December, 1907, contained 48 pages of copy and 14 full pages of advertisement—a healthy proportion for a reputable non-trade publication. It was printed at The Print Shop, 102 King Street, Winnipeg. There is today at 442 Notre Dame Ave. an establishment called The Print Shop—the direct successor of the original firm. A search of its old records could have yielded most interesting information, including costs of paper, typesetting, printing, binding, etc., and might even have included penned notes from the editor to the printer but alas—all the records were destroyed in the Winnipeg flood of 1950!

There remains only one complete set of the Journal on the shelves of the stack room in the Medical Library of the University of Manitoba. The volumes constitute a permanent record of one phase of medical growth in Western Canada. Their leading articles reflect the acme of sound professional opinion of the day. The "Current news" sections tell of changes of location, holidays abroad, the formation of partnerships, attacks of illness, and retirements from practice. Births, deaths and marriages form landmarks to reflect the emotional lives of the passing generation of doctors. Political turmoils alerted the profession then as they do today. Two outstanding factors which have since vanished are revealed in the accounts of practice 45 years ago, the first being the prevalence of personal injury sustained by the drivers of horsedrawn vehicles, and the second being the ghastly ravages of that scourge of old frontiers, namely, typhoid fever, then an endemic plague that was later to carry off the Editor himself on the 11th day of May, 1919.

General Practitioners

General Practitioners' Association of Manitoba
In Affiliation with the Manitoba Medical Association

Presidential Address*

**Delivered at the Annual Meeting of the General Practitioners' Association of Manitoba by Dr. Jack McKenty retiring President.*

State Medicine — A New Approach to an Old Question

In attempting to discuss a subject so large and so complex in its far-reaching ramifications, I am only too well aware of my brashness and inability generally. However, I am merely going to try to point out some frequently overlooked facts about State Medicine, which though unconsciously realized, are yet surprising when we are confronted with them en masse or in review.

The late Calvin Coolidge, twenty-ninth President of the United States, on his return from church one Sunday, was asked by a friend the subject of the minister's sermon. Mr. Coolidge "Sin."

"What did he have to say about it?" asked the friend.

Mr. Coolidge thought for a minute and then replied: "He was agin it," he said.

When the average doctor is asked his opinion of State Medicine, he usually replies, with no latent period, that he is "agin" it.

Examined a little more closely as to what exactly it is that he is against, he may reply (1) that it will mean the sacrificing of the freedom of his individual enterprise for the regimentation of a job, (2) that having a job will mean that he can be ordered around, perhaps almost as much as his present patients order him around, (3) that his holidays and free-time will be, perforce, prescribed and limited by his employers, (4) that his salary, while steady and sure, will not be as much as he made before under the system of individual enterprise.

The last is really the crux of the whole problem. It is the real fear on the part of all of us, that our efforts will not be rewarded with as much legal tender as we think we are worth.

Say to a fellow colleague: "Look here! under the new system of State Medicine envisaged, you will receive an annual salary starting at \$3,600 and working up by statutory increases until it has reached \$5,000. The hours will be 8:00 a.m. to 6:00 p.m. daily. You will be on night call every second night and will have one Sunday in three for yourself. Your holidays will be two weeks annually, the same subject to curtailment if the exigencies of conditions demand it," and end by saying, "How do you like the idea?"

He will tell you almost immediately that he doesn't. On the other hand, say to the same man that under the Honourable Paul Martin's new health scheme, each doctor will start with a Salary of \$1,000 a month—after taxes—rising to a figure double this in ten years. Tell him he will be forced to take four weeks' holidays a year with full pay and another month to be spent in post-graduate study—all expenses paid by the government. His hours will be 10:00 a.m. to 4:00 p.m., Saturdays 10:00 a.m. to 12:00 noon except for eight weeks in the summer when there will be no Saturday hours. He will be on call one night a week and one Sunday a month, and regimentation and paper work of all kinds will be cut to a minimum or handled by medical secretaries paid by the Department. Retirement at sixty on half salary.

I repeat, say that to him and what will he say? Well, there will be a short pause for station identification and then he'll say: "When did you say we start?"

The question, then, is, almost entirely, one of degree.

It is hardly likely that conditions under State Medicine would be as bad as the first case I outlined, and I feel morally certain that they would never approach the Utopian ideals contained in the second example. Some middle ground is likely, but before resigning ourselves to it, we may do well to ask ourselves, "To what extent is State Medicine already here?"

Well, you may say without thinking: "State Medicine is not here at all, as yet; it may come some day but up to now there is, with only a few exceptions, no State Medicine here."

Let us examine a few of these "exceptions."

We could not do better than to start with the Provincial Compensation Boards. They, you will admit, handle the administration of the industrial surgery of the nation. While, for the most part, the injured workman is free to choose his own doctor, the doctor in turn is working for the Board—as far as that particular case is concerned—to the case's conclusion. He is subject to their rules and regulations and must accept their schedule of fees. The Board can ask him to have a consultation with another doctor, can dictate on the question of hospitalization of a case, can rule whether or not a workman is fit to resume his work or even, in extreme instance, take the case out of the hands of the original doctor altogether.

Most Compensation Boards are well administered and have another point in their favour. As too much money is bad for anybody, the Boards

have thoughtfully seen to it that no M.D. is going to be ruined by lush and easy Workmen's Compensation fees.

I may make this aside, however, that since this paper was originally drafted, our own Compensation Board in co-operation with the M.M.A. has come out with a new and revised fee schedule which I think we all agree in saying is very much fairer than the old one.

"But," you say, "that is Industrial Surgery. It is only fair that the State administer that. Get back to the medical side of things."

O.K. How about tuberculosis? This is a disease that is almost 100% State-controlled, State-administered and State-treated, and a good thing it is.

Nobody would want a return to the dark ages here. Once you make a diagnosis of tuberculosis you turn it over secure in your knowledge that it will be well and efficiently handled. Only one thing. How often do you make a diagnosis of T.B. these days? Just slightly over the number of times you make a diagnosis of small pox. As far as the man in general practice is concerned, T. B. is almost as extinct as the Dodo. That's a wonderful tribute to the unflagging zeal with which the anti-tuberculosis campaign has been waged. Dr. E. L. Ross sounded a note of warning recently when he said we were in danger of becoming too smug in our attitude toward T.B., that it is still an omnipresent danger. That is true, of course, but how many of you here, in the last year, made a diagnosis of pulmonary T.B., late, early, or any kind? Probably not 2%.

Other communicable diseases. Largely state-handled. (By the term "State" I include municipal and civic governments as well as Federal and Provincial.)

You would not want it otherwise. Once again as soon as the diagnosis had been made, or suspected, the more serious infective cases, or cases leading to possible crippling complications, such as polio, are taken over by the municipal hospitals and handled far more efficiently than you and I could handle them, under the care of salaried M.D.'s. There is no argument here at all. This is the best procedure but don't tell me that communicable diseases play much part in the working economy of the G.P. of today. They are, in large part, State-handled.

Do you know how many beds there are in the Province for Mental Diseases Patients? Well, I'm not certain but it's something like 2200, almost as many as all other hospital beds combined. The State looks after the mentally ill and it's a good thing it does. Things would be a shambles if it were otherwise. So outside of the initial diagnosis which is arrived at something like this: "Hello, Psychopathic Ward? This is Doctor Blank. Say Doctor I've got a nut on my hands . . ."

Outside of the initial diagnosis, then, the general practitioner doesn't have to worry about the really mentally ill. The State looks after them as to diagnosis, treatment, maintenance, etc., employing its full-time psychiatric physicians to carry this out.

Then there are the wards of the Government—Indians and Eskimos. Here I am referring to Treaty Indians, not the wealthy ones that play football.

They have their full-time, well-trained physicians, paid by the Government of Canada (we used to say Dominion Government) to look after them. The private doctor may serve, and be paid for his services, in an emergency, but such emergencies are few and far between. True, these Government wards number less than two hundred thousand but their care is just another example of State Medicine, this time on the Federal level, which is here already.

There is another type of Government wards. These are not strictly wards. We are most likely to be their wards in case of war. I refer, of course, to the members of the armed services. They total now well over the hundred thousand mark and their medical and surgical needs are provided for by the Government as indeed they should be.

How about the Diagnostic Clinics throughout the country? It is thought by many that these may develop into therapeutic clinics, as well, in time. They are doing grand work, especially in the earlier diagnosis of malignancy. The combination of radiologist plus his equipment, pathology laboratory and diagnostician is a powerful one and impressive. If I were the individual on whom a diagnosis of early, operable malignancy had been made, my next reaction would be to ask for a similar clinic—a therapeutic one, State-controlled. I'd say: "Go ahead and carve or cobalt-bomb the malignancy out of me!" (I hope I'm not getting too technical.)

Then we have the health examinations and mass inoculations and vaccinations of school children and pre-school-age children, a most laudable piece of work, run and financed by Civic Health Departments. They really turn up a lot of work for practicing physicians and many a T. & A. is performed and many a pair of eyes refracted because of notes the short citizens bring home from school defining their deficiencies.

The care of indigents, or, in many cases, self-professed indigents, is too well-known for me to go into it here. The out-patient departments of our larger hospitals and Children's Hospital, manned by their honorary staffs and financed, in part, at least, by funds from Civic and Provincial grants is yet another example of State-run, State-controlled Medicine.

Then there is the venereal disease question. When I started in practice in 1925, I certainly

did not have very much legitimate practice the first few years. But I never lacked for a number of cases of both gonorrhea and syphilis to treat and neither did my confreres.

Nowadays I practically never see such cases. In fact, since 1945 I've had about three cases of Neisserian Infarction and two or three of syphilis. I do not attribute this, either all or in part to the anti-biotics or to my efforts to acquire a better grade of practice. Nor do I think that it indicates a moral upswing on the part of the whole community. In my considered opinion, it is due to the improved, easy, and free treatment accorded by the Venereal Disease Clinics. You tell me that you don't care, that the treatment of Venereal Disease is repulsive to you anyway. That's fine, because you're certainly not going to be bothered with it.

I have merely touched on some examples of

State Medicine, all well-known and accepted by us without question. I have not named them all. You can think of more that I have neglected to mention. Suffice it to say that just about the greatest *rara avis* (that's Latin for rare bird) to come into a practicing physician's office today, is a patient without ties or encumbrances of any kind, without forms to fill out or letters to write, who doesn't say, at the conclusion, "Now, Doctor, will you see that the bill is sent to . . ."

Now, ladies and gentlemen, this has been a rambling kind of talk. In closing, I have to admit that I have drawn no conclusions and certainly pointed out no moral. I can, however, terminate my discussion with a line that may give you something to think about. It is this:

State Medicine—What are you afraid of? It is no longer in the waiting-room; it is already in your office. It is, in fact, more than half here now.

Book Review

Correlative Neuroanatomy and Functional Neurology, by Joseph J. McDonald, M.S., M.Sc.D., M.D., Professor of Surgery, Columbia University, etc., and Joseph G. Chusid, A.B., M.D., Attending Neurologist, St. Vincent's Hospital, New York. University Medical Publishers, P.O. Box 1215, Los Altos, California. Price \$4.00.

This is a very useful book which must surely enjoy a large sale. The present edition (the 6th) is larger both in page size, in number of pages (now 263) and in scope.

The contents are divided into three sections. Section 1 is devoted to embryology, and to the anatomy and the physiology of the brain. The second section considers the peripheral nerves. Section three presents the principles of neurodiagnosis. The fourth section contains eight chapters in which are discussed the commoner nervous disorders.

The letter press is greatly condensed. It is a series of statements of fact with a minimum of elaboration. There are 173 illustrations which are for the most part diagrams which are large and clear. A number of tables summarise comparisons.

For purposes of quick reference, rapid orientation and revision the book is excellent.

In Memoriam

Dr. J. S. Stewart died at Winnipeg on Sept. 22, 1952. The following lines are extracted from the remarks of the minister who conducted the funeral service:

"The death of Dr. Stewart has removed from his family and friends one of God's choicest servants. He had lived to a ripe old age, 88 years. Naturally at that age his physical powers had waned but happily his mental powers remained clear to the last . . ."

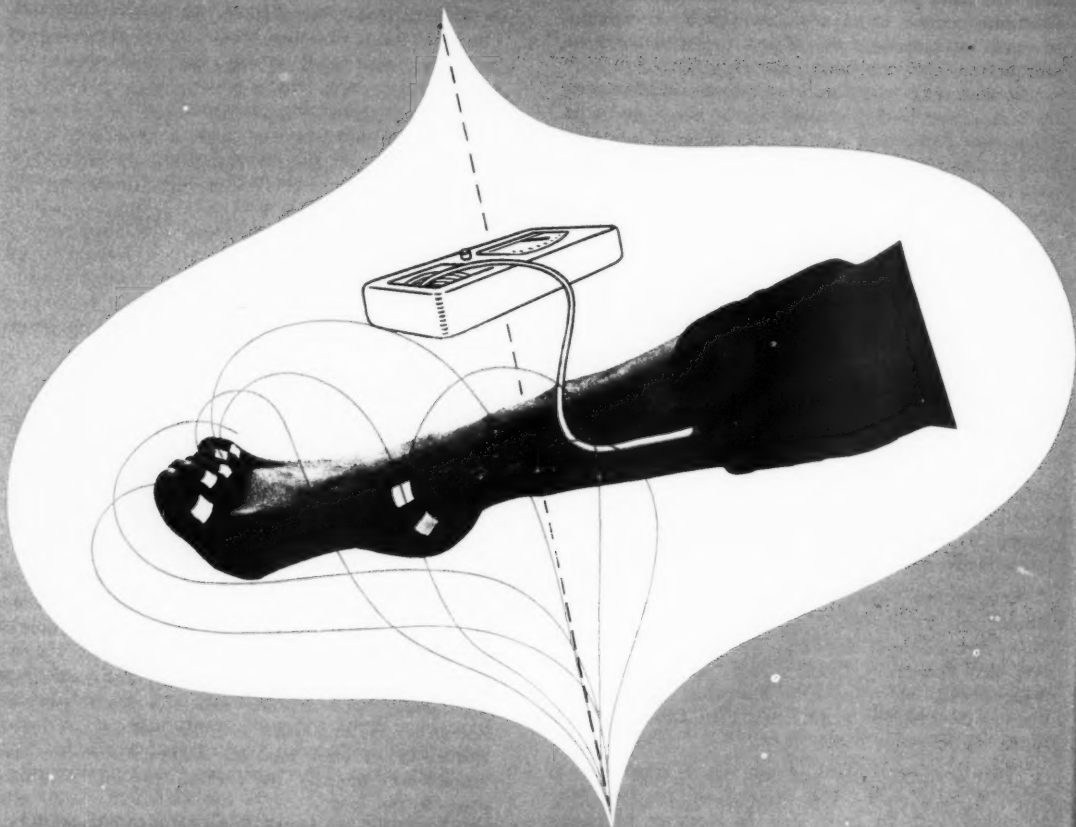
"It is a long way from Wick in Scotland where he was born to Shoal Lake and Oak River. He brought with him a love for the Church and deep moral principles. These characteristics remained with him throughout his life . . ."

"He was almost the last of the old rural family practitioners. What a great group they were! . . . In the early days they often had long drives over bad roads with the old team and buggy or cutter."

"They hadn't the scientific equipment of the younger doctors of today. Neither did they have the 'wonder drugs.' They had to depend upon their own experience and knowledge and the success they had was remarkable."

"There need be no repining on the death of a man like Dr. Stewart. He had lived his life to the full. To his profession, his country and his God he gave a great fidelity. Then he fell upon sleep."

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1. Reedy, W. J.: J. of Lab. & Clin. Med. 37: 365 (March) 1951

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Editorial

J. C. Hossock, M.D., C.M. (Man.), Editor

Disease and Disaster People Don't Worry

People are, almost all of them, in a continual state of anxiety but there are certain things about which they appear to be little concerned. One of these is the disaster of another war. A second is the price of disease, or, if you like, of health.

At the recent Convention there were, one might say, two "flops." One of these was the presentation on Civil Defence. The other was the Public Meeting. The attendance at these sessions showed that the doctors weren't interested in preparing for the war-that-may-never-come, and that their patients were equally indifferent to the cost of sickness.

It is a long time since blood, shed in battle, has stained Canadian fields. At the moment war does not seem imminent. There is no assurance that the world is soon to be disrupted, consumed and destroyed. Therefore interest in Civil Defence is not easily aroused. The trouble is that we cannot foresee the future. In one of his essays in the Spectator Addison tells about a "certain lewd young man" who encountered a hermit. Approaching the aged anchorite he toyed with, and dishevelled, the old man's beard saying the while (in words to this effect)—"You know, old chap, you'll be frightfully out of luck if there is no Heaven." To which the hermit replied, as he straightened out his beard, "And so will you—if there is."

And so are we likely to be—for a while at least—should fire suddenly rain upon us from the skies. But, until something like that happens, very few people are going to concern themselves with Civil Defence. In the parable only half of the virgins failed to supply their lamps with oil. In this matter not five out of ten but fewer than five in a hundred seek to be prepared.

Should the emergency arise there will then be no lack of volunteers eager to learn and anxious to apply their knowledge. The best that can be hoped for now is that a sufficient number of foresighted ones will be found and trained, so that, when disaster comes, there will be no lack of teachers, for then there will be no lack of pupils. But for a while at least the Civil Defender will be a voice crying in the wilderness.

As for the Public Meeting, its poor attendance may be accepted as a good omen. If the people felt that the doctors were racketeers, if they found the burden of sickness a crushing one, they would have been there in numbers hurling their invectives and clamouring for relief.

But nothing like that happened. A mere handful of people, many of whom appeared out of sense

of duty, faced the speaker. The price of health does not seem to be worrisome to the members of our community. To be sure, most healthy people are naive enough to believe that what happens to others won't happen to them. These see no sense in worrying about the price of health when obviously they are in active enjoyment of it. Then there are those who have protection, a number that increases daily. Even those who have had expensive illnesses are not greatly interested because most of them have learned by their own experience and by that of others, how wise it is to obtain protection and will in time acquire it.

Therefore, looked at in retrospect, there was no reason to expect a large turnout. But at the time the meeting was planned we envisaged large throngs pressing into a crowded hall. Indeed, we wondered if we should not engage the Auditorium! Thank goodness we didn't. Some one had suggested Theatre A at the College but the rest were convinced that the space afforded would be far too small. As a matter of fact I feel sure that we would have got a larger audience at the College. In addition to those genuinely interested in the price of health there would undoubtedly have been some curious people who would attend in the hope of stumbling upon a cadaver or a skeleton or a group of vivisectionists at work. To many, a Medical College is a spooky sort of place, and, especially to them, the gruesome and macabre are titillating to the extent that they would even endure a lecture on the off-chance of getting a thrill.

As it was, the attendance was small but appreciative. Dr. Kelly presented his case well and doubtless brought conviction to any still unconvinced. But the very fact that the attendance was so small is evidence in itself that one of the things our citizens don't fret about is the price of health.

The Convention

In arranging the recent Convention certain innovations were introduced. First, the days of meeting were extended from three to four. Second, all the presentations were conducted under a single roof. Third, among the guest speakers were two distinguished alumni. All of these proved to be successful ventures. The attendance was larger than ever before and, while many saw fit to voice their commendations, none expressed displeasure or disappointment.

Many factors contributed to this success. First of all, the Scientific Programme Committee was set up early and was well directed. Each member performed his duties with proper industry but the chief burden was borne upon the shoulders of Dr.

Gowron. As chairman it was his responsibility to arrange for outside speakers and to achieve a balanced programme. This he did with no little effort or, rather, with a great deal of effort.

I would have noted this in any case but it happens that more than one doctor suggested to me that public commendation in these pages would not only be fitting but highly proper. As a member of his committee I was impressed by his system, energy and despatch. He did a good job, but, as you will see in his letter published elsewhere, he regards himself as but the fortunate director of a congenial and efficient group to whom the credit is chiefly due.

Letter to the Editor

Editor,
Manitoba Medical Review.
Dear Sir:

As Chairman of the Scientific Programme Committee, I would like to take this opportunity of expressing my sincere gratitude to all the members of this Committee for their help in preparing this programme; to all the chairman of daily sessions, who did a fine job; and to all those who helped entertain our visiting speakers.

Especially, I would like to thank our Past-President, Dr. A. M. Goodwin, and our Executive-Secretary, Dr. M. T. Macfarland, for their continuous efforts and co-operation and finally, our visiting and local speakers for the very excellent papers which they presented.

It was only because of such a united effort that it was possible to bring before the members of this association, such a fine programme.

Faithfully yours,

A. T. Gowron, Chairman,
Scientific Programme Committee.

Amendment to Constitution and By-laws At Annual Meeting on October 9th, 1952

The Constitution and By-laws of the Manitoba Medical Association, by unanimous vote, was amended so as to permit of representation on the Executive Committee from the Health Officer Section of the newly organized Manitoba Public Health Association, which section now replaces the dissolved Manitoba Health Officers' Association.

Psychiatric Section of Manitoba Medical Association

The above section met on May 28th, 1952, at the Hospital for Mental Diseases, Brandon, Manitoba, under the Chairmanship of Dr. George Little. After a lively business meeting the following scientific papers were presented and discussed: (1) "The Aged Patient in the Mental Hospital," presented by Dr. W. Forster; and (2) A Cerebral Vascular Lesion in a 15-Year-Old Girl, a case presented for discussion by Doctors G. Elliott, K. Anstreicher and M. Saunders. Dr. Stuart Schultz and his staff were then hosts for a thoroughly enjoyable social get-together and dinner.

During the annual meeting of the M.M.A., the Winnipeg members of the above section were hosts to out of town members, at a dinner at the Royal Alexandra Hotel, on the evening of October 8, 1952. Seventeen members attended.

Southern District Medical Society

A meeting of the Southern District Medical Society was held at Morden District Hospital, Morden, on Thursday, October 30th, 1952, at 3 p.m.

Present were: Doctors W. M. Colert, President; J. F. Menzies, Secretary-Treasurer, and A. F. Menzies, of Morden; S. S. Toni, J. G. Lohrenz, Altona; E. K. Cunningham, H. W. C. North, Carman; J. R. McDougall, Elm Creek; J. P. Boreski, Gretna; C. L. Blight, Miami; J. C. Elias, J. S. Holowin, Morris; G. Friesen, Pilot Mound; T. W. D. Miller, Roland; J. H. Boucher, St. Jean; C. W. Wiebe, A. P. Warkentin, Winkler; A. W. Andison, Dwight Parkinson, M. T. Macfarland, Winnipeg.

Business Session: Dr. W. M. Colert, Morden, was re-elected President and Dr. J. C. Menzies, Morden, was re-elected Secretary-Treasurer. Dr. H. W. C. North of Carman, was reappointed representative to the Executive Committee of the Manitoba Medical Association.

Scientific Programme Guest Speakers: Dr. A. W. Andison, Winnipeg, spoke on "Vaginal Discharge—Diagnosis and Therapy, and Dr. Dwight Parkinson, Winnipeg, spoke on "The place of Lumbar Puncture in Diagnosis and Treatment."

Following the meeting a delicious dinner was served, and a vote of thanks was tendered Miss O. Dennison.



Social News

Reported by K. Borthwick-Leslie, M.D.



**This Column wishes You and Yours the Season's Heartiest Greetings
and a Wealth of Health and Happiness in the New Year.**

Congratulations: To the new men announced for appointments by President Gillson.

Dr. J. M. Lederman, from associate professor to professor in the department of Pathology. Dr. Lederman, born in Milverton, Ont., received his early education in Regina and obtained his B.Sc. in the University of Saskatchewan in 1932. He graduated in Medicine from the University of Manitoba in 1936, going immediately into pathology, where he had been associate professor since 1947.

Also named is Dr. John Charles Wilt as associate professor of bacteriology and chairman of the department. He succeeds Dr. Fred T. Cadham who has retired after notably long years service. Dr. Wilt is a graduate of the University of Manitoba, has done meritorious work in the department as to scientific papers on bacteriological subjects. In 1950 he was certified in pathology by the Royal College of Physicians and Surgeons of Canada.

Dr. T. H. Williams has also been promoted from assistant professor to associate professor in the department of pathology. Dr. Williams graduated from the University of Manitoba in 1916, serving in the R.C.A.M.C. from 1917 to 1918. Then serving from 1920 to 1927 as a medical missionary in China, where he became an expert in the clinical pathology of tropical diseases. He is director of laboratories in Deer Lodge Hospital.

Not of local interest, but definitely of all Medical associations is the announcement of the awarding of the Medal of Honor of the Canadian Pharmaceutical Manufacturers' Association to Dr. T. C. Routley, General Secretary of the C.M.A. in recognition of "his exemplary statesmanship in the field of international medicine."

Sincere anniversary congratulations to Dr. and Mrs. M. C. O'Brien, Qu'Appelle, Sask., on their Golden Wedding, Aug. 13, 1952. Dr. O'Brien will be well remembered by members of the Northwest Medical Society and some of those who knew him in Dominion City and Birtle, Man., where he practised prior to moving to Saskatchewan in 1930. It is rumored that early in life Dr. O'Brien was definitely a "going concern" and kept on being so. In London, England, as a student lived in luxury—suite, valet and all that, gaining various championships on the track. But—failed in one subject in his final exams, and without more ado was cut off without the proverbial shilling by his father, a wealthy Indian Civil Servant. The lad migrated to Winnipeg—of all places—and by dint of devious jobs, including vaudeville, saved enough to finish his medical degree and in 1902 dashed by horse power to Dominion City, changed teams, picked up his bride, Margaret Eleanor Barber, and off in a cloud of dust to Emerson, Man., to be almost on time for his own wedding. The golden wedding anniversary was also a family reunion,

and hundreds of friends, patients and associates paid their respects to a beloved member of the profession. I understand he is still in active practice.

Thank you, Dr. Rawson—sorry to be one issue late.

How lucky can the Irish be! Mrs. Joan McArdle (Eileen) walked off with the \$300.00 Name the Picture Tribune Contest last week. I certainly doff the bonnet to people who can figure these . . . things out, and are lucky enough to collect. Me, I bet on Edmonton, to be sure the Bombers win, and doggone it, if for the first time in my life, I won. Never again will I bet against the home team—have lost faith in my routine bad luck.

Is it ethical to welcome to our clan Dr. Walter Alveraz—Mayo consultant for 25 years, who is now writing a lovely column in the Tribune, which I give you warning you had better read! All the patients do. He has the Digest beaten a mile, re questions.

Congratulations also to seven successful candidates in the recent Medical Council examinations—as of—D. Carr, Walter Kost, Albert Lecot, N. W. Turner, K. O. Wuillie, all of Winnipeg; Nancy K. V. Sirett, Erickson, Man., and F. G. Turcker, Swan Lake, Man.

To Dr. Maurice Berger, elected a fellow of the American Academy of Pediatrics as announced by an official executive in Evanston, Ill. The academy includes a membership of 3,500 Pediatricians in Canada, the U.S. and Latin America. Nice recognition, Maurice.

November 1, in Russell, Man., Betty Marie Brownlee, daughter of Dr. and Mrs. T. I. Brownlee, became the bride of Reginald Mac Jamieson, son of Mr. and Mrs. Jas. Jamieson, Winnipeg. Mr. and Mrs. Jamieson will reside in Silver Heights, Winnipeg.

Welcome to the Juniors:

Dr. and Mrs. George Johnson, Gimli, Man., announce the birth of Jon Blondal, Nov. 19.

Dr. and Mrs. R. M. Rutherford happily announce the birth of their fourth son, another brother for Donna, Nov. 12.

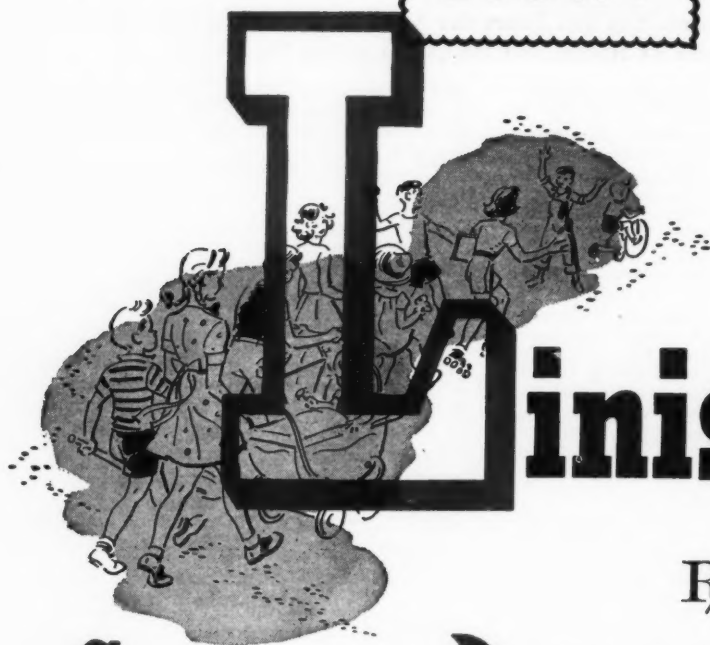
Dr. and Mrs. G. F. Friesen announce the birth of Gerhard Charles, Oct. 30, at Morden General Hospital.

Dr. and Mrs. John F. S. Hughes announce the arrival of David John Frederick, Oct. 21, in London, England. Registered at Canada House!

Dr. and Mrs. Kenneth G. S. Davidson announce the birth of a daughter, Nov. 21, at the Maternity Pavilion, Winnipeg General Hospital.

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College of Physicians and Surgeons of Manitoba

Specialist Register

The following by-law was approved at the Annual Meeting of Council on October 13th, 1951:

WHEREAS the College of Physicians and Surgeons of Manitoba deem it desirable that a Register of Specialists be established and maintained by the College.

AND WHEREAS The Medical Act provides for the recording of higher degrees or additional qualifications of persons whose names appear on the Manitoba Medical Register.

NOW THEREFORE BE IT ENACTED and it is hereby enacted as follows:

1. That the Council do establish and maintain a Register to be kept by the Registrar to be known as the Specialists Register in which shall be entered the names of all persons who have complied with the provisions hereof.

2. Any person whose name appears in the Manitoba Medical Register and who is either:

- (a) A Fellow of the Royal College of Physician sand Surgeons of Canada; or
- (b) A certificated specialist of the Royal College of Physicians and Surgeons of Canada;

shall be entitled to have his name entered in the Specialists Register.

3. Any person whose name appears in the Manitoba Medical Register may at any time before January 1st, 1954, make application to be registered as a specialist and upon approval of his application by the special committee, apointed as hereinafter provided, may have his name entered in the Specialists Register.

4. The special committee hereinbefore referred to shall consist of six members as follows:

- (i) Two representatives of the College of Physicians and Surgeons of Manitoba appointed by the Council and of whom one shall be the chairman of the committee;
- (ii) Two representatives of and appointed by the Faculty of Medicine of the University of Manitoba; and
- (iii) Two representatives of and appointed by the Manitoba Medical Association.

The members of the committee shall hold office until and including the 31st day of December, 1953, on which day the said committee shall cease to function. It shall be the duty of the committee to pass upon the qualifications of any applicant for registration in the Specialists Register to accept or reject the application.

5. On and after the 1st day of January, 1954, either a fellowship of the Royal College of Physicians and Surgeons of Canada or an enrollment therein as a certificated specialist shall be accepted standard for registration as a specialist, provided, however, in special circumstances a person whose name appears in the Manitoba Medical Register and who is not a Fellow or certificated specialist of the Royal College of Physicians and Surgeons of Canada may apply to have his name entered in the Specialists Register. The Council, after inquiry into the circumstances of the case, may in its sole discretion accept or reject such application and if accepted direct that upon payment of the presribed fee the name of the applicant be entered in the Specialists Register.

Application form accompanied by supporting documents and the fee of Five Dollars (\$5.00) payable at par in Winnipeg, should be forwarded to Dr. M. T. Macfarland, Registrar, 604 Medical Arts Building, WINNIPEG, Manitoba.

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College of Physicians and Surgeons of Manitoba

Finance Committee

A meeting of the Finance Committee was held at 4 p.m., D.S.T., on Friday, May 9th, 1952.

Present: Dr. T. H. Williams, Chairman; Dr. C. W. Wiebe, Dr. B. Dyma, Dr. F. K. Purdie, President, ex-officio; Dr. C. E. Corrigan, Vice-President, ex-officio, and Dr. M. T. Macfarland, Registrar, ex-officio. Dr. A. M. Goodwin, President, Manitoba Medical Association, and Dr. Ruvin Lyons, Treasurer, Manitoba Medical Association, were also present by invitation.

The Chairman explained the Finance Committee had been requested to consider three subjects:

1. A motion to be brought to Council for augmenting the income of the College.

2. The possibility of investing College funds to yield more than the 3% now received from Government bonds.

3. The purchase of the Apex Building.

It was suggested that items 2 and 3 could be considered at the same time, since the purchase of the Apex Building would bring in revenue from the tenants.

1. The Chairman stated he had compared the registration fee in Manitoba with other provinces, and Manitoba is one of the three most expensive provinces in Canada. He suggested that since the increase in costs was due to a large extent to the extra work put on the staff because of applications from doctors other than Manitoba graduates, that a new fee be incorporated, a non-recoverable documentary fee of Twenty-Five Dollars (\$25.00) from all applicants, except Manitoba graduates, to be paid before the documents are examined for eligibility. If the documents are not found to be satisfactory, this fee would not be refunded. He said that this fee could be charged under Section 37 of the Medical Act.

The Registrar explained that many letters do not go past the initial inquiry, but a considerable amount of time is spent on additional correspondence obtaining the required documents, and getting them in order for presentation to the Registration Committee.

The Registrar was requested to bring in an estimate of the revenue that would be obtained if the additional Twenty-Five Dollars (\$25.00) documentation fee was put into effect.

Motion: "THAT the Finance Committee recommend to Council that a non-refundable documentation fee of Twenty-Five Dollars (\$25.00) be required from all except Manitoba graduates who apply for Enabling Certificates or registration, to be paid before documents will be examined for eligibility." Carried.

2. The Treasurer read the following sections

of the Medical Act relevant to purchasing property:

"2. The medical profession of Manitoba, heretofore incorporated under the name and style of 'The College of Physicians and Surgeons of Manitoba,' shall be deemed to be and to have been from its first establishment a body corporate by that name, having perpetual succession and a common seal, with power to acquire, hold and dispose of real and personal property for the purposes of this Act, and to sue and be sued in the manner usual with such corporations."

"89. The funds of the college, or any part thereof, may be invested by the council, in the name of the College of Physicians and Surgeons of Manitoba, in the debentures of any incorporated city, town or rural municipality, or school district, in the Province of Manitoba, authorized to issue bonds or debentures, or in the public securities of the Dominion of Canada, or of any province thereof, or upon the security of mortgage on any real property in the Province of Manitoba, for such term or terms, and at such rates or rates of interest, and in such manner, and upon such security, as may be agreed upon between the parties borrowing and the council."

"90. The college shall have full power and authority to acquire, take, hold and dispose of all such real and personal property, as may have been or shall be bona fide mortgaged, transferred, assigned, hypothecated or pledged to the college by way or security or conveyed to it in satisfaction of debts previously contracted, or purchased at judicial sales upon levy for such indebtedness, or otherwise purchased for the purpose of avoiding a loss to the college in respect thereof, or of the owner thereof."

It was pointed out that the College had \$60,000.00 in 3% Dominion of Canada bonds, and that the higher the rate of interest on an investment the less security. To realize on our bonds we would take a slight loss because the market value is below par, although the interest is at par value. The purchase price of the Apex Building is now \$115,000.00, and with the necessary alterations required to make the available space meet the needs of the College, a mortgage would have to be taken out at about 5%. Also the estimated income from other tenants in the building was quoted at \$7,672.46, but would be less depending on the space required by the combined business offices, and it would be necessary to employ someone to manage the building.

It was agreed that the purchase of real property is good security at the present time, but that the College should not go into debt. It was suggested that an offer of approximately \$85,000.00 be made

for the building. The Registrar was requested to obtain the solicitor's opinion whether the College was authorized under the Medical Act to purchase real property.

A tour of inspection of the Apex Building was made after which the following motion was passed:

Motion: "THAT the matter of purchase of the Apex Building be deferred until the opinion of the solicitor is secured." Carried.

3. The Registrar advised he had received an estimate of \$175.00 from Price, Waterhouse and Company, for auditing the books for the year 1951-1952. This amount is the same as last year.

Motion: "THAT Price, Waterhouse and Company be appointed auditors for the year 1951-1952." Carried.

Adjournment.

Council Meeting

A Special Meeting of the Council of the College of Physicians and Surgeons of Manitoba was held Saturday, May 17th, 1952, at 10 a.m. D.S.T., in the Medical College, Winnipeg.

The President, Dr. F. K. Purdie, called the meeting to order.

The business before the meeting was as follows:

1. Roll Call:

The following members were present:

Doctors F. K. Purdie, President; C. E. Corrigan, Vice-President; T. H. Williams, Treasurer; B. D. Best, W. J. Boyd, C. S. Crawford, B. Dyma, H. Guyot, Edward Johnson, A. L. Paine, I. Pearlman, T. W. Shaw, C. B. Stewart, C. H. A. Walton, William Watt, C. W. Wiebe and M. T. Macfarland, Registrar.

A period of silence was observed in memory of the late Dr. G. P. Armstrong, a member of Council.

Results of By-Election in Constituency of Neepawa:

The Registrar reported that Dr. Wm. Watt had been elected to the Council as representative of the constituency of Neepawa, in the recent by-election. The President welcomed the new member of Council.

Election Statistics:

For information, the Registrar advised there were 13 physicians in the constituency of Neepawa, 12 of whom were eligible to vote or be elected to the Council. 4 Nomination Papers were returned, 4 members were nominated, 1 of whom did not accept nomination. 9 Voting Papers were returned.

Disposal of Nomination and Voting Papers:

Motion: "THAT the results of the By-Election in the constituency of Neepawa be recorded, and the nomination and voting papers be destroyed." Carried.

2. Reading of the Minutes and their Approval:

The President advised that mimeographed copies of the minutes of the Annual Meeting of

Council held October 13th, 1951, had been forwarded to each member of Council.

Motion: "THAT the minutes of the Annual Meeting of Council held October 13th, 1951, be accepted as having been read." Carried.

Business Arising From Minutes of Council Meeting Held October 13, 1951

Unregistered Physicians:

The Registrar explained he had been instructed at the Annual Meeting of Council in October to bring in details on unregistered physicians practising in the Province of Manitoba, and presented three files. One doctor is employed by one of the railways on a travel car doing examinations but no treatment. He is registered in Saskatchewan and his name is on the inactive list as a member in good standing without payment of the annual fee. The other two were employees of the Department of Indian Affairs but have since left the Province. They are both graduates from the United Kingdom, one has his L.M.C.C. and is registered in another province, the other has registered in Saskatchewan since leaving this Province, but neither was registered in Manitoba while practising here. He advised that the matter had been discussed at a meeting of the Registrars, but no action was taken as the Civil Service Commission requires that their employees must be registered and in good standing with one Province of the Dominion.

Motion: "THAT correspondence be sent to the Deputy Minister, Department of National Health and Welfare, stating that the Medical Act requires that all physicians practising in Manitoba must be registered, pointing out that two employees had practised in the Province for over a year without being so registered, and requesting an understanding that the Department will not employ medical practitioners who are not registered in one Province of Canada as required by the Civil Service Commission." Carried.

3. Reports of Officers and their Consideration:

Treasurer's Report

Your treasurer begs to report as follows:

Balance on hand in the Current Account at the Bank of Toronto at the beginning of the current year on October 1st, 1951, was \$4,285.11. All bills and commitments have been met and there is on hand in the bank in this account at May 1st, 1952, the sum of \$4,303.81. So that current income is practically level with expenditure for the period. During the remaining 5 months of the year expenditure is likely to exceed income but our balance will take care of it.

However, the addition of extra office help and expense makes a deficit over the year possible unless registrations maintain the high level achieved recently. To meet this situation the

Finance Committee proposed a Documentation Fee of \$25.00 for each applicant for Registration who is not a Manitoba graduate. This is because the extra office help is required largely on account of these applicants for registration. Your treasurer believes this will meet the situation unless there is a major decrease in registrations in which case extra office staff should no longer be required.

The Investment Trust Account has a credit balance of \$1,717.49 on hand at present and Dominion of Canada 3% bonds totalling \$60,000.00.

The Gordon Bell Memorial Trust Account has a cash balance on hand of \$1,243.59 and Dominion of Canada 3% Bonds totalling \$25,500. This fund is committed to pay a grant of \$150.00 per month for one year beginning July 1, 1952, to Dr. Colin Ferguson, which can be met from accrued interest. Any further grant during that period would require reduction of bond holdings.

The Finance Committee have made some enquiries concerning investment of the Investment Trust Account funds in securities that will realize more than 3% profit but have no action to suggest at present.

Respectfully submitted,

T. H. Williams, M.D., C.M.,
Treasurer.

Motion: "THAT the Treasurer's Report be accepted." Carried.

4. Reports of Standing Committees and their Consideration:

A. Executive Committee:

The Chairman, Dr. Stewart, advised there had been two meetings of the Executive Committee held since the October Council meeting (January 22nd, and April 9th, 1952) and copies of all minutes had been distributed to each member of Council.

Motion: "THAT the report of the Executive Committee be accepted." Carried.

Business Arising From Minutes of Executive Committee Meetings

(a) Interne Year:

The Chairman, Dr. Stewart, advised that a communication from the Secretary of the Medical Faculty had been considered at the meeting of the Executive Committee on January 22nd, quoting a motion that the matter of granting the M.D. degree at the end of the fourth year be referred back to the original committee for consideration. The Committee agreed that this matter should be postponed until further word was received from the Medical Faculty.

(b) Electoral Districts:

The Chairman, Dr. Stewart, advised that at the meeting of the Executive Committee on January 22nd it was agreed to postpone amending the electoral districts until more widespread changes in the Medical Act were being made.

Communication From the Legislative Counsel, Province of Manitoba

The Registrar read a communication under date May 14th, from the Legislative Counsel for the Province of Manitoba, in which he advised that the statutes of the Province were under revision, and while looking over the Medical Act he wished to point out some obsolete sections.

Section 5—the electoral districts outlined are out of line with the present electoral districts.

Section 32—presumably anyone entitled to be registered under this section would be registered by this time.

Section 44—provides for striking off the register a person convicted "of any felony or misdemeanor." This language is out-of-date since the distinction between a felony and a misdemeanor was abolished some time ago by the Criminal Code. Also under this section a registrant convicted of "any offence or breach against, under or of any statute of the Province of Manitoba," shall "forfeit the right of registration and by direction of the council his name shall be erased from the register." Presumably a registrant convicted of exceeding the speed limit on the highway is subject to being struck off the register, or under Section 45 would appear to require consideration by the Council. Some modification might appear advisable.

The Legislative Counsel suggested if the C.P. & S. decided to make any changes in the Medical Act, the matter should be attended to well in advance of the opening of the session of the Legislature.

Motion: "THAT the Legislative Committee prepare the necessary amendments to the Medical Act for presentation to the Council meeting in October." Carried.

(c) Annual Fees—Members of the Armed Forces:

The Registrar advised that the matter of payment of annual fees by members of Her Majesty's Permanent Forces stationed outside of Manitoba was considered at the meeting of the Executive Committee on January 22nd, and referred to Council. It was pointed out that during the last war medical officers were not charged the annual fee; that medical officers with temporary or permanent registration and stationed in Manitoba are charged the annual fee; and that according to the Medical Act, if a registrant does not practise in the Province during any part of the calendar year, he is not required to pay the annual fee unless he requires a certificate.

Motion: "THAT medical officers, fully registered in Manitoba serving in the armed forces, be not required to pay the annual fee while they are serving outside the Province of Manitoba." Carried.

(d) Communication From M.M.A. Re Complaint Against a Doctor:

The Registrar advised this matter had been discussed at the meeting of the Executive Committee held April 9th, and he had been instructed to make informal inquiry to the Department of Health whether it had been finalized. The Deputy Minister advised no further action had been taken and believed it would be unwise to reopen the case at this date.

Motion: "THAT the matter be considered closed." Carried.

(e) Office Staff:

It was agreed to leave this matter over to the report of the Finance Committee.

(f) Request From Medical Library Committee for Increase in Annual Grant:

It was agreed to leave this matter over to the report of the Finance Committee.

(g) Report of Finance Committee Re Augmenting the Income of the College:

It was agreed to leave this matter over to the report of the Finance Committee.

(h) Registrars' Meeting in Banff, June, 1952:

The Registrar outlined the topics for discussion suggested at the Executive Meeting on April 9th, and inquired whether there were any further suggestions. He also presented the proposed agenda forwarded by the Registrar of the C.P. & S. of Alberta, and an outline of a letter to be forwarded to the Executive Secretary of the C.P. & S. of British Columbia concerning the regulations regarding Enabling Certificates, which, along with information received from the other provinces, will be discussed at the Registrars' meeting.

(i) Letter Re Drug House:

The Registrar advised that this matter had been referred to Council by the Executive Committee at the meeting held April 9th, and he had been requested to obtain further information from the solicitor of the proposed company concerning incorporation, method of sale, labels, etc. The reply received stated that the applicants did not wish the College to express formal approval of their plan, but merely wish to be assured that the plan would not be contrary to the ethics of the profession.

The Registrar was instructed to contact the solicitor advising of the opinion of the Committee on Credentials and Ethics of the C.M.A. that such a practice was an undesirable venture for medical men, that we concur with the principle, but do not have the power to express an opinion on the ethics of the plan.

Motion: "THAT the correspondence be filed." Carried.

(j) Purchase of Apex Building:

It was agreed to leave this matter over to the report of the Finance Committee.

(k) Letter From Honourable Paul Martin:

Dr. C. E. Corrigan, Chairman of the Discipline Committee, read the letter which was forwarded to the Minister of National Health and Welfare as the result of investigation and discussion by the Executive Committee at the meeting held April 9th, and considered the matter was now closed.

B. Registration Committee:

Since the annual meeting of the Council the Registration Committee had met on five occasions.

One student registration was granted. Eleven enabling certificates were granted. Certificate of registration was authorized in twenty instances. Six Certificates of licence were granted and one was reinstated. There were nineteen deferments of applications for enabling certificates. Four applications for certificate of registration were deferred.

The Committee continued to be concerned with a number of difficult problems, the largest one being the numerous applications from Chinese applicants. It is very difficult to judge from even the most complete documentation whether any particular individual should be granted an enabling certificate or a certificate of registration. In one instance we did grant a certificate of registration on the basis of excellent documentation and a personal interview, and afterwards discovered that the applicant had been in considerable difficulty in the Province of Quebec. The difficulty was such that his registration could not be withdrawn once granted, but would certainly not have been granted if it had been known beforehand.

Respectfully submitted,

C. H. A. Walton, M.D.,
Chairman.

Motion: "THAT the report of the Registration Committee be adopted." Carried.

Dr. Walton also advised that correspondence had been carried on with General Medical Council of Great Britain because of the implications to the reciprocity agreement with the G.M.C. the registration of Chinese applicants might cause. He said that information had been received from the G.M.C. to the effect that a registrant with the C.P. & S. of Manitoba could obtain registration in the colonies without first registering in Great Britain.

C. Education Committee:

No meeting.

D. Finance Committee:

The Chairman, Dr. Williams, advised there had been two meetings of the Finance Committee since the October Council meeting, held February 17th and May 9th. Mimeographed copies of the February 17th meeting had been circulated to each member of Council, and Dr. Williams read the minutes of the May 9th meeting.

Motion: "THAT the report of the Finance Committee be adopted." Carried.

Business Arising From Minutes of Finance Committee Meetings

(a) Office Staff:

(Refer to next meeting of Executive Committee).

(b) Request From Medical Library Committee for Increase in Annual Grant:

At the meeting of the Finance Committee held on February 17th, it was considered that the College did not have the power under the Medical Act to increase the annual grant to the Medical Library. It was pointed out that under Section 16 (2) of the Medical Act a fee could be charged and collected from each member of the College, resident in Winnipeg and applying for the privileges of the library.

Motion: "THAT a special grant of Two Hundred and Fifty Dollars (\$250.00) be granted to the Medical Library Committee, to be paid from the Investment Trust Account." Carried.

(b) Purchase of Apex Building:

The purchase of the Apex Building was discussed at the meeting of the Finance Committee on May 9th, but was deferred until the opinion of the solicitor had been secured. The Registrar read a letter under date May 15th from the solicitor in which it was stated that in his considered opinion the College had power to purchase the property and to hold it including the right to lease such portion of the lands and premises as are not immediately required for the purposes of the College.

After considerable discussion it was agreed that it would be unwise to go into debt to buy a building at this time, since the College is not in a financial position to complete purchase at the present time.

Motion: "THAT the College of Physicians and Surgeons of Manitoba do not purchase the Apex Building." Carried.

(c) Re Augmenting the Income of the College:

The Chairman, Dr. Williams, advised that this matter had been discussed at the meeting of the Finance Committee on February 17th and May 9th, and a motion was passed that a non-refundable documentation fee of Twenty-Five Dollars (\$25.00) be required from all except Manitoba graduates who apply for Enabling Certificates or registration, to be paid before documents will be examined for eligibility.

Applicants from European and Chinese medical schools are causing extra work for the office staff, the Registrar, and Registration Committee, and it was felt that they should pay for this service.

From October 1, 1950 to September 30, 1951, 160 enquiries were received from European graduates; and from October 1, 1951 to April 30, 1952,

186 inquiries were received from European graduates.

The following certificates were issued during the year October 1, 1950 to September 30, 1951, and according to the motion passed by the Finance Committee these 49 applicants would be required to pay the documentation fee of Twenty-Five Dollars (\$25.00) before their documents would be considered by the Registration Committee.

Enabling Certificates—2 Canadian, 9 Chinese, 2 U.S.A., 7 European.

Registration—8 G.M.C., 5 Canadian, 1 New Zealand, 2 Chinese, 2 U.S.A. 1 European, 1 Australian.

Temporary Licence—3 G.M.C., 5 Canadian, 1 Australian.

Notice of Motion: "THAT Council charge a non-refundable documentation fee of Twenty-Five Dollars (\$25.00), required from all except Manitoba graduates who apply for Enabling Certificates or Registration, to be paid before documents will be examined for eligibility."

The Treasurer advised that at the Meeting of the Finance Committee held February 17th, the Committee suggested giving serious consideration to changing part of the bond holdings for others of higher interest rate acceptable to the provisions of the Medical Act.

It was suggested that amendment be made to The Medical Act so that College funds could be invested in other than government bonds and first mortgages.

Motion: "THAT the Finance Committee be authorized to investigate the desirability of investing up to 25% of the \$60,000.00 in bonds, in first mortgages of city property." Carried.

Appointment of Auditors

Motion: "THAT Price Waterhouse & Co. be appointed auditors for the year 1951-1952." Carried.

E. Legislative Committee:

The Chairman, Dr. Wiebe, advised there had been no meetings of the Legislative Committee held since the Annual Council meeting in October. He stated that three members of the Committee were from rural Manitoba and two from the City of Winnipeg, and inquired whether two additional members from the City could be appointed to assist in reviewing The Medical Act, so that there would be a quorum in case the rural members could not be present.

Motion: "THAT the Executive Committee assist the Legislative Committee in reviewing The Medical Act." Carried.

F. Library Committee:

Dr. Johnson stated he had nothing further to report other than the additional grant to the Medical Library Committee which was discussed under the Finance Committee.

Motion: "THAT the report of the Library Committee be adopted." Carried.

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G. Discipline Committee:

The Chairman, Dr. C. E. Corrigan, advised he had nothing further to report other than the two cases discussed under the Executive Committee.

Motion: "THAT the report of the Discipline Committee be adopted." Carried.

H. Taxing Committee:

No report.

5. Reports of Special Committees and their Consideration:**A. Representatives to the Manitoba Medical Association Executive:**

No special report.

B. Trustees of the Gordon Bell Memorial:

No report.

C. Representatives to Committee of Fifteen:

No report.

D. Representative to the Committee of Selection in Medicine on Student Selection:

There have been no interim meetings of this Committee and until the results are known of examinations now being written no meeting will occur, consequently your representative has nothing to report at this meeting.

Respectfully submitted,

T. H. Williams, M.D., C.M.

Motion: "THAT the report of the representative to the Committee be adopted." Carried.

E. Representatives to the Medical Council of Canada:

Motion: "THAT we recommend to the Medical Council of Canada that double the number of oral examiners be appointed, for times when the number of students is excessive." Carried.

F. Representative to the University Senate:

No matters of special interest to this College came up for consideration at meetings of the Senate of the University.

I served on the Senate Committee for the administration of the Basic Sciences Act. As usual, this Committee was very busy dealing with applications for Basic Science standing. The problems considered continued to be of much the same pattern as previously and there have been no major changes of policy since my last report. In my opinion the Basic Science Committee acts as a most useful screen of applicants to the College for enabling certificates and licensure.

I was also a member of the Senate Committee of the School of Nursing Education. This school still carries on its precarious existence with very limited funds. During the past year three candidates qualified in the course on nursing education and supervision, and eight in the course on public health. I feel that the school is making a most useful contribution to nursing education in this province and it is hoped that it may continue successfully and that ultimately a degree course

in nursing may become practical.

All of which is respectfully submitted.

C. H. A. Walton, M.D.

Motion: "THAT the report of the Representative to the University Senate be adopted." Carried.

G. Representative to Cancer Institute:

No report.

H. Representatives to Liaison Committee—

M.M.A.-C.P. & S.

No report.

I. Representative to Canadian Arthritis and Rheumatism Society:

The Registrar reported he had attended four of the five meetings of the Medical Advisory Committee and the Annual Meeting.

J. Representatives to Specialist Committee:

This Committee has met on only one occasion for the purpose of organization. No applications were considered.

The Committee consists of the following:

Representatives of the Medical Faculty—Drs.

B. D. Best and Norman Elvin.

Representatives of M.M.A.—Drs. F. G. Allison and M. R. MacCharles.

Representatives of C.P. & S.—Drs. F. K. Purdie and C. H. A. Walton, Chairman.

Registrar-ex-officio—Dr. M. T. Macfarland.

Fourteen applications for specialist registration have been received by the Registrar and have been granted because of Royal College of Canada qualifications. A number of other applications have accumulated which must come forward to the Committee and it is expected that these will be dealt with before long. It would appear from the past six months' experience that the Specialist Registry will grow slowly.

All of which is respectfully submitted.

C. H. A. Walton, M.D.

Motion: "THAT the report of the Representatives to the Specialist Committee be adopted." Carried.

6. Election of Officers and Standing Committees:

Not applicable at this meeting.

Election of Special Committees**A. Representative to University Senate:**

Motion: "THAT Dr. C. H. A. Walton be appointed our representative to the University Senate, to take effect at the beginning of the University year." Carried.

7. Reading of Communications, Petitions, etc., to the Council:**A. Communication From College of Physicians and Surgeons of British Columbia:**

For information, the Registrar presented communication from the Executive Secretary, C.P. & S., B.C., advising that the following resolution was passed at the recent meeting of their Council:

"RESOLVED that Student Registration with the College of Physicians and Surgeons of British

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- ▶ **RAPID EFFECT**—*Profound and restful sleep is quickly induced following the administration of 1-3 tablets ½ hour before bedtime.*
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<i>Sodium diethylbarbiturate (barbital).....</i>	<i>45 mg.</i>
<i>Sodium phenylethylbarbiturate (phenobarbital).....</i>	<i>15 mg.</i>
<i>Sodium allylisobutylbarbiturate (Sandoptal).....</i>	<i>25 mg.</i>
<i>Dihydroergotamine methanesulfonate.....</i>	<i>0.16 mg.</i>
<i>Scopolamine hydrochloride.....</i>	<i>0.08 mg.</i>
- ▶ **GENERAL DOSAGE**—*As a hypnotic:*
1-3 tablets ½ hour before bedtime.
As a daytime sedative:
1 or 2 tablets 2 or 3 times daily.
Maximum daily dosage: 8 tablets.



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B. Communication From College of Physicians and Surgeons of British Columbia:

Communication was presented from Dr. Murray Blair advising of his retirement as Registrar of the C.P. & S., B.C., and of the appointment of Dr. Lynn Gunn.

C. Communication From Dr. _____:

The Registrar reviewed previous correspondence with Dr. _____. He was granted an Enabling Certificate in 1942, failed the L.M.C.C. examinations on three occasions, and the Enabling Certificate was cancelled in 1945, by the Council of this College. He had difficulty with the Medical Council of Canada and the Immigration Department. He changed his name to _____ in 1946, but now carries on correspondence under the name of _____. He has now reopened the matter, and challenges the right of this body to cancel an Enabling Certificate, or of the Medical Council of Canada to limit the number of examination trials.

Motion: "THAT Dr. _____ correspondence be referred to the Registration Committee." Carried.

D. Communication From Smith Kline and French Inter-American Corporation:

The Registrar presented a communication from Smith Kline and French Inter-American Corporation, inquiring whether certain non-medical doctors are permitted to prescribe in the Province of Manitoba under the existing regulations. The Registrar read the outline of a reply he had prepared, quoting the relevant portions of the various legislative acts.

The Registrar was instructed to reply and point out the references to each of the relevant acts which are operative at the present time.

8. Inquiries:

None.

9. Notices of Motion:

Notice of Motion: "THAT Council charge a non-refundable documentation fee of Twenty-Five Dollars (\$25.00), required from all except Manitoba graduates who apply for Enabling Certificates or Registration, to be paid before documents will be examined for eligibility."

10. Motions of which notice has been given at a previous meeting:

A. In accordance with the Notice of Motion given by Dr. C. E. Corrigan at the October meeting of Council:

Motion: "THAT the By-law concerning automatic suspension of members suffering from Mental Disease or of unsound mind be accepted." Carried.

B. The following Notice of Motion was given by Dr. C. E. Corrigan at the October, 1951, meeting of Council, and deferred to this Council meeting:

"THAT reconsideration be given to the motion concerning internships passed at a meeting of the Education Committee, October 18, 1948, and approved by Council, October 20th, 1948."

Motion: "THAT the Notice of Motion concerning internships be withdrawn." Carried.

11. Unfinished Business:

Register:

The Registrar advised that The Manitoba Medical Register, with information up to September 30, 1951, was now in the hands of the printers, and should be available for distribution in a very short time.

12. Miscellaneous and New Business:

A. Election Year:

Motion: "THAT the Registrar be empowered to put in action the necessary machinery for the election of a new Council." Carried.

B. Payment of Janitor:

Motion: "THAT the sum of Five Dollars (\$5.00) be paid to the janitor for his services." Carried.

C. Payment of Luncheon:

Motion: "THAT the balance of Twenty-Four Dollars (\$24.00) be paid for the luncheon." Carried.

D. Amount to be Paid to Council Members for This Meeting:

Motion: "THAT the amounts paid to members of Council for attendance at this meeting be the same as for the October meeting." Carried.

E. Date of Next Council Meeting:

Motion: "THAT the Annual Meeting of Council be held on Saturday, October 11th, 1952." Carried.

Adjournment.

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Folic Acid	3.6 mg.
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Thiamine Mononitrate (6 times MDR*)	6 mg.
Riboflavin (3 times MDR*)	6 mg.
Nicotinamide (2 times RDA†)	30 mg.
Pyridoxine Hydrochloride	3 mg.
Pantothenic Acid	6 mg.
Ascorbic Acid (5 times MDR*)	150 mg.

*MDR—Minimum Daily Requirement

†RDA—Recommended Daily Dietary Allowance

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Post Graduate Studies

A Refresher Course will be held as usual during the month of April, 1953, and once again arrangements have been made to have guest speakers participate in the course.



Russell R. de Alvarez, M.D.

One of the guest speakers is Dr. Russell R. deAlvarez, Department of Obstetrics and Gynecology, University of Washington; the subject of his paper will be announced at a later date.

Dr. deAlvarez graduated from the University of Michigan in 1935 and was Consultant in Obstetrics, Department of Postgraduate Medicine of the University of Michigan for the Michigan State Medical Society, and the Michigan Department of Health from 1941-1944. He was Attending Gynecologist, University of Oregon Hospitals from 1946-1948. At the present time he is Professor and Executive Officer, Department of Obstetrics and Gynecology, University of Washington School of Medicine, Obstetrician and Gynecologist-in-Chief, King County Hospital, Seattle, Washington. Dr. deAlvarez served in the Armed Forces as Lieutenant-Commander, Medical Corps, U.S. Naval Reserve (January, 1944, July, 1946), (16 months on the Carrier U.S.S. Hollandia; the remainder in the Department of Obstetrics and Gynecology, N.S. Naval Hospital, San Diego, California, in charge of the Section of Gynecology). Dr. deAlvarez is a member of the American Gynecological Society, Diplomate, American Board of Obstetrics and Gynecology, and a Fellow of the American College of Surgeons, besides various other organizations and societies.

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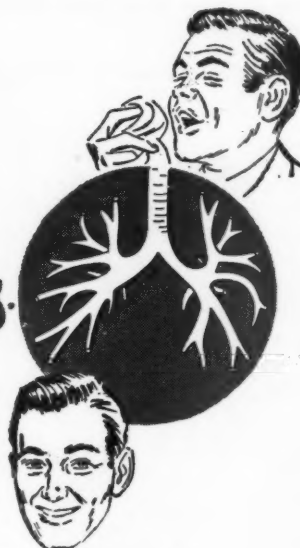
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Scilexol with Camphorated Tincture of Opium was administered in doses of 0.1 ml. per kilo. of bodyweight to four different species of mammal in an independent laboratory. In every case, a marked increase in the secretion of respiratory tract fluid confirmed early clinical findings that Scilexol is a very efficient cough preparation.

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Department of Health and Public Welfare
Comparisons Communicable Diseases — Manitoba (Whites and Indians)

DISEASES	1952		1951		Total	
	Sept. 7 to Oct. 4, '52	Aug. 10 to Sept. 6, '52	Sept. 9 to Oct. 6, '51	Aug. 12 to Sept. 8, '51	Jan. 1 to Oct. 4, '52	Jan. 1 to Oct. 6, '51
Anterior Poliomyelitis	206	158	19	12	506	38
Chickenpox	57	34	65	53	1000	1261
Diphtheria	0	0	0	0	2	5
Diarrhoea and Enteritis, under 1 yr.	33	13	18	17	115	141
Diphtheria Carriers	0	0	0	0	0	1
Dysentery—Amoebic	0	0	0	0	0	0
Dysentery—Bacillary	0	1	0	1	14	24
Erysipelas	1	2	5	1	12	27
Encephalitis	1	2	2	0	4	4
Influenza	12	5	6	3	130	777
Measles	51	43	44	46	1161	2815
Measles—German	2	0	0	2	13	38
Meningococcal Meningitis	0	1	5	2	12	32
Mumps	65	72	51	38	1089	1144
Ophthalmia Neonatorum	0	0	0	1	1	2
Puerperal Fever	0	0	0	0	1	1
Scarlet Fever	25	13	81	73	533	1041
Septic Sore Throat	1	4	6	2	68	27
Smallpox	0	0	0	0	0	0
Tetanus	0	0	0	1	3	1
Trachoma	0	0	0	0	0	0
Tuberculosis	86	80	71	71	645	841
Typhoid Fever	4	1	0	0	5	2
Typhoid Paratyphoid	0	0	0	0	2	0
Typhoid Carriers	0	0	0	0	0	0
Undulant Fever	1	0	2	1	4	11
Whooping Cough	38	25	53	37	380	385
Gonorrhoea	108	103	117	105	1031	962
Syphilis	9	5	22	7	90	136
Infectious Jaundice	2	3	0	0	29	0
Tularemia	1	0	0	0	4	0

Four-Week Period September 7th to October 4th, 1952

DISEASES	*776,541 Manitoba	*861,000 Saskatchewan	*3,825,000 Ontario	*2,952,000 Minnesota
(White Cases Only)				
*Approximate population.				
Anterior Poliomyelitis	206	362	216	1484
Chickenpox	57	87	206	—
Diarrhoea & Enteritis under 1 year	33	5	—	—
Diphtheria	—	1	—	7
Diphtheria Carriers	—	—	—	—
Dysentery—Amoebic	—	—	—	2
Dysentery—Bacillary	—	—	22	9
Encephalitis Epidemica	1	2	—	3
Erysipelas	1	1	—	—
Influenza	12	2	—	3
Infectious Jaundice	2	5	22	6
Measles	51	46	167	17
German Measles	2	5	38	—
Meningitis Meningococcus	—	2	4	10
Mumps	65	48	445	—
Ophthal. Neonat.	—	—	—	—
Puerperal Fever	—	—	—	—
Scarlet Fever	25	26	55	16
Septic Sore Throat	1	4	1	11
Smallpox	—	—	—	—
Tetanus	—	1	—	—
Trachoma	—	—	—	—
Tularemia	1	—	—	1
Tuberculosis	86	54	88	147
Typhoid Fever	4	1	1	—
Typh. Para-Typhoid	—	—	2	2
Typhoid Carrier	—	—	—	—
Undulant Fever	1	—	2	—
Whooping Cough	38	43	160	9
Gonorrhoea	108	—	188	—
Syphilis	9	—	74	—
Malaria	—	—	—	24

***DEATHS FROM REPORTABLE DISEASES**

For the Month of September, 1952

Urban—Cancer, 51; Influenza, 1; Lethargic encephalitis, 1; Pneumonia (other forms), 3; Poliomyelitis, 3; Tuberculosis, 2; Diarrhoea and Enteritis, 2; Infectious hepatitis, 1. Other deaths under 1 year, 7. Other deaths over 1 year, 144. Stillbirths, 24. Total, 175.

Rural—Cancer, 29; Influenza, 1; Measles, 1; Pneumonia Lobar (490), 491-493, 6; Tuberculosis, 4; Diarrhoea and Enteritis, 2. Other deaths under 1 year, 15. Other deaths over 1 year, 165. Stillbirths, 11. Total, 191.

Indians—Cancer, 2. Other deaths under 1 year, 2. Other deaths over 1 year, 2. Stillbirths, 1. Total, 7.

Poliomyelitis has been epidemic in Western Canada and has been of a rather severe type. At date of writing (October 22nd) 605 cases, including 22 deaths have been reported in Manitoba. Approximately one-half of these have some degree of paralysis and a goodly proportion will require extensive treatment.

It should be remembered that those patients who are unable to pay for the treatment of any crippling condition as a result of polio may apply for assistance to the Society for Crippled Children of Manitoba, 588 Broadway Avenue, Winnipeg.

Typhoid Fever—Two more cases developed in the family at Portage la Prairie where we had one reported before. No doubt these were due to contact with the original case before it was diagnosed.

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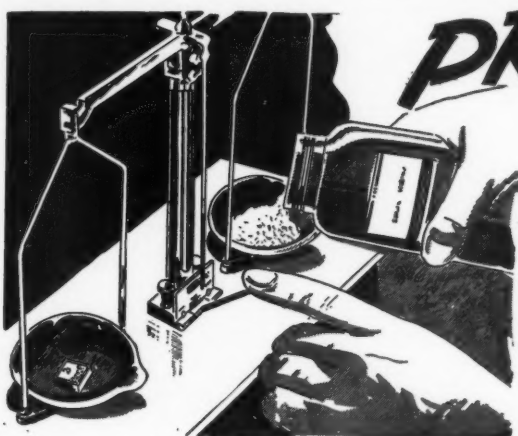
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